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ABSTRACT

A practitioner's model of the processes of learning and knowing was developed through a review of global, societal, individual, and personal perspectives on learning. The first phase of the model's development consisted of using a method of exploration based on determining who, what, where, when, why, and how to investigate the following 10 concepts related to learning and acquisition of knowledge: andragogy; transformational learning; experiential learning; situated cognition; critical theory; knowledge for action; women's ways of knowing; multiple intelligence; emotional intelligence; and flow. The concept of triangulation was used to review what at least 3 authors had to say regarding each of the 10 concepts. The results of the review were synthesized into a verbal and visual representation of the learning for knowing process that was termed the Practitioner's Model about Learning for Knowing. The visual representation consists of seven figures illustrating the following concepts: the triangulation process; questioning within the triangulation process; questioning as a process of integration of external/internal variables; questioning/answering within the infinite learning process; questioning/learning as an infinite process using internal/external influences; questioning including all 10 concepts; and questioning/learning as an infinite lifelong variable process. (Contains 56 references.) (MN)

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Towards the Development of My Practitioner's Model About Learning for Knowing

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S. Perry

c. Sally-Anne Perry, 2000

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Abstract

This paper was founded by the writer's personal quest to develop a method of organizing and understanding the learning and knowing processes as they relate to her experience as an adult practitioner. It was initiated to make explicit the tacit process of how the writer learns and knows, and seeks to represent the process of moving towards the development of an adult learning model.

The author reviews global, societal, individual, and personal perspectives and how these influence the learning and knowing process. Ten concepts are chosen, investigated, and analyzed using a method of exploration where the questions **Who, What, Where, When, Why, and How** are answered. This process is termed the *5 Ws and H* questioning methodology throughout the paper. Each concept is reviewed, synthesized, critiqued, and applied to the writer's personal experience. The ideas of learning, knowing, and practitioner are also explained according to each concept.

Literature included in the review was initially derived from the course content of graduate study and motivated by a background in psychology and social work. Also explored were areas such as ecology, philosophy, and management science.

Using the results from the initial exploration, attention is turned toward developing a visual representation of the learning for knowing process. The emerging model is termed a Practitioner's Model about Learning for Knowing, and involves both the verbal and visual portrayal of a learning journey. The author concludes with recommendations for further study, ensuring it remains a work in progress.

I An Initial Explanation

To assist the reader to understand the construct of this document, a special note must be included at this point. The paper you are about to read contains three voices, and each is uniquely spaced within the document to add clarity:

The first voice, double spaced here and throughout the writing, is my summary of the views of others who write, express their ideas, and contribute to my understanding of the field of adult education.

The second voice, single-and-a half-spaced here and throughout, contains my own synthesis of the ideas of other practitioners. Essentially these sections contain my interpretations of the voices of others.

The third sections are each single-spaced. The writer will recognize my own unique thoughts, criticisms, and applications as they relate to each concept included. The single-spaced sections illustrate my own method of learning and knowing, in that I represent the process of going to the external domain, interpreting it within the personal domain, and formulating a new understanding based on this method of organization. Single-spaced sections represent *my* voice throughout the paper.

The spacing used within these pages, as presented above, is my attempt to represent verbally *and* visually the learning for knowing process I engage in as a practitioner.

II Introduction

I am currently an employment consultant who develops work experience opportunities for people on 'welfare.' Prior to this, I was a career counselor, social worker, employment and client support services (ECSS) worker, computer trainer, youth worker in the correctional system, lifeguard, and swimming instructor. My academic preparation was social work and psychology. I have occupied various roles throughout my employment history and have repeatedly acquired the knowledge, attitudes, practices, and skills necessary to engage in each new opportunity.

My interest in adult education grew from a need to succeed in my wide variety of career pursuits. I have always enjoyed learning new things, acquiring new skills, or further developing existing ones. This curiosity about learning and knowing led me to graduate study in the area of adult education. I sought to develop a deeper understanding of how I learn and know, so I could continue to engage in these processes successfully.

As a social worker interested in adult learning, I lacked formal background in the area of adult education. I sought to examine the perspectives of others and integrate this with my own experience. Ultimately this process of going broad, then going deep would facilitate a more inclusive understanding of the field. It was my overly ambitious intention, after three years of part time study, to leave the adult education faculty with a 'mastery' of the field.

I felt overwhelmed by the time I was to write the final paper. Frameworks, theories and models floated unanchored through my mind, leaving me confused, not enlightened. Each course I took offered a piece of the puzzle, but the coherent whole eluded me. I was certain I knew *something* after practicing in the field, and studying adult education. I felt I had learned so much, I forgot what I knew and I struggled to articulate my 'knowing'. With my coursework complete, I felt less 'masterful' than I had when I began, and my ambitions to develop 'mastery' seemed unlikely at best.

I consulted with my graduate advisor, who pointed out that I could still go broad or go deep. I could select a specific topic and learn it in depth, or I could examine the entire field from a broader perspective. I chose the latter, feeling that I wanted a general knowledge base, and could not specialize until comfortable with the field. From this consultation evolved the purpose for the paper.

I needed to work towards developing a method of organizing my understanding into a coherent whole that I could use and apply in other settings. I wanted it to be useful to me today, yet expandable as further learning continues to occur. Through dialogue with my graduate advisor, I decided to create an adult learning model that met my needs as a practitioner. In other words, I chose to work towards the development of my practitioner's model about learning for knowing based on my experience as a practitioner.

I utilized a reading technique developed by Smith (1983) to help organize the vast array of information I was to gather, and examined various ideas by asking each a pre-determined set of questions. The questions were: **Who, What, Where, When, Why, and How?** I recorded my 'knowing' of the answers based on what each said to me, then summarized the results with the questions included. With this tool, I could investigate the question of how I learn and know, while also being able to review, synthesize, critique, and apply information obtained from the public domain. Throughout the paper, I refer to this method of questioning as the *5 Ws and H method.*

I read material by prominent practitioners in the adult education field such as Kolb (1984), Merriam and Cafferella, (1991 & 1993), and Mezirow (1990). I also investigated authors from other disciplines such as Capra (1996), Goleman (1995), and Csikszentmihalyi (1990 & 1997). As I explored, I included or excluded information based on my critical analysis of the text, and its applicability to my personal experience as a practitioner. I remind the reader that the thoughts obtained from the public domain are double-spaced to differentiate them from my own (which are single-spaced). My synthesis of the work obtained from the public domain is 1.5 spaced throughout the paper. I reiterate my intent to demonstrate my learning and knowing process as a practitioner via this verbal and visual representation.

To introduce further organization to the final product, I categorized it into the following sections:

Introduction to the format, construct and purpose of the paper.

Reflective Background. Seeking to start broad and then go deep, this section identifies and examines some of the many external and internal influences that effect my learning and knowing processes. I organize these influences into four categories; global, societal, individual, and personal perspectives. I investigate information from the public realm, then apply it to the personal realm.

Literature Review, Synthesis and Critique. Returning to the public realm, the literature review examines findings of adult education practitioners and authors who study how people learn and know. I select ten concepts that most influence my understanding of the field for three reasons. I read and was impressed by Merriam's (1993) Jossey-Bass publication. I also followed recommendations from my graduate advisor, and other practitioners. Finally, I was motivated by my interest in psychology and social work. I limited the review to ten in the interest of time and thoroughness. I also investigated the views of three different authors with regard to each concept thus employing a technique called *triangulation* (Creswell, 1998, p. 202).

The synthesis portion presents the results of my findings concerning each concept's view of the *5 Ws and H* questioning methodology. Organizing the concepts around these six questions allowed for comparison and contrast, and added simplification to complex ideas. I also discussed the ideas of learning, knowing, and practitioner as each concept addresses them. This helped to apply the concepts in the development of my practitioner's model about learning for knowing.

The application portion adds the dimension of personal relevance to each concept. I sought not only to learn about key concepts in the field of adult education, but also to relate each concept by way of application to the world I live in. This step helped me construct the bridge from theory to application, enabling me to understand the concepts and also what I could *do* with the concepts. In addition, it was necessary to demonstrate the critical skills gained during graduate study.

The Model. This section *visually graphically* portrays seven stages towards the development of my practitioner's model about learning for knowing. Utilizing the thoughts of others, my own thoughts, and a synthesis process that is reflected in the written section, I formulated a visual model that included the major points from the body of the paper. The *triangulation* process is also depicted visually as it occurred in the previous written format.

Summary. This section reviews the written and visual portions of the paper, offers a synopsis of the major points, and draws the paper to a close.

Future Directions. This final section outlines plans for further investigation and study. Presented here are my ideas for the continued refinement, expansion, and application of the model.

The following document is intended not only to explain, but also to illustrate the movement towards the development of my practitioner's model about learning for knowing. In the verbal and visual components of the paper, I wish to represent the key concepts in my learning for knowing process.

These components include triangulation, the effective use of questioning, and the identification and synthesis of internal and external influences. The process of choosing a topic, investigating it with increasing complexity (taking it to the public realm), then making it personally relevant (bringing it back to the personal realm) is also portrayed. I seek to enable others to read about and visualize these components throughout the document. The result will be an insight into the learning for knowing process of this practitioner.

III Reflective Background

This section offers the 'background' required for the remainder of the paper. I describe the global, societal, individual, and personal influences that effect my exploration of the adult education field, and also effect my personal process of learning and knowing.

In reflecting on this process, I recognized that I do not learn/know in isolation. There are internal and external variables that effect me, and how I synthesize these influences for myself partially explains the question of how I engage in the learning process. I recognize that I am often unaware of these variables, yet they are inherent in understanding how I learn and know. My relationship with these influences needs to be made conscious, therefore they are described in the following section.

After identifying that these influences exist, I organized them into global, societal and individual perspectives, thereby gradually narrowing my focus. The personal perspectives completed this review, and outlined my own answers to the questions asked of the literature in the subsequent section. I sought to expand my thoughts initially, then return with them to the point where I could understand how they relate to me as a practitioner. This method of organization illustrated the roles that internal variables, external variables and my synthesis of them have played in my learning/knowing.

A Global Perspective

I approached the field of adult education because I wanted to learn to adapt to an ever-changing work world. Upon reflection, this was a narrow way of looking at the field, but it was my initial motivation for further study. Kegan (1994) writes that few students come to educational programs with the desire to change their way of thinking; ultimately, they meet the demand to reflect on themselves and society, develop critical thinking and learn to see themselves as co-creators of culture (p. 64). Through my coursework and exploration of the field, I also came to understand that I wanted to expand my perceptions and assume a more global perspective.

I reviewed books from three other disciplines in order to explore how global influences impact my learning and knowing, and chose the books based on an article by Hill (1998). She suggests that adult education must promote new ways of looking at reality to solve the issues that dominate the world agenda. Further "our thought must allow us to re-evaluate the beliefs inherited from our cultural systems rather than be captive by them in the process of developing our own meanings, systems, and worldviews" (p. 57). Intrigued by the title, and motivated to explore new constructs and content to include in my model, I wanted to investigate writers from other disciplines. Her article gave me the direction I sought.

Capra (1996) is a physicist who explores the idea of 'deep ecology'. This view does not separate humans -or anything else- from the natural environment. "It sees the world not as a collection of isolated objects, but as a network of phenomena that are fundamentally

interconnected and interdependent" (p. 7). He asserts that the tendency to view things as separate entities existing independently of each other must be challenged if society is to alter its present course. One facet of the world cannot be altered without inadvertently altering many other facets as well because all life is interconnected and interdependent. Thinking must "shift from the mechanistic worldview of Descartes and Newton to a holistic, ecolological view" (p. 5). This paradigm shift would allow society to 'know' that each component of the world system serves its own unique purpose.

Developmental psychologist Kegan (1994) postulates two higher levels of consciousness that he feels people must develop to cope with the complexity of modern life. Modernism and post-modernism are more complex ways of organizing our understanding of the world around us and are, in his opinion, critical to our ability to adapt to a complex life. Modernism is an evolution in the method people use to organize their thoughts and understand their reality. Post-modernism, according to Kegan, "does not view the self or others as a single system or form, understands interaction as prior to the formation of self, and conceives of conflict as a sign of identification with false assumptions of wholeness, distinctness, and completeness" (p. 314). Hill (1998, p. 58) adds "Identity is constructed and reconstructed in multiple contexts; it is never whole or complete since it is formed by our interactions, which are varied and constantly emerging". She believes that "one of the goals of adult education should be to help adults develop the ability to organize their thoughts in relation to the environment, and use this organizational method to understand the highly complex situations adults find themselves in" (p. 59).

Lifton (1993) is a psychologist who offers his readers the concept of what he calls a "protean self". Lifton explores "the dark side of human behavior in the hope that by

probing the psychology of evil and destructiveness, we would be better able to combat this behavior and seek alternatives" (p. 11). The protean self is an evolution that some people have managed to develop, which essentially allows them to cope with the complex modern reality they find themselves in, thus avoiding participation in evil and destruction. In his research he found that "while the protean self (or resilient person) may have experienced much pain and trauma in and after childhood, it is able to transmute that trauma into various expressions of insight, compassion, and innovation" (p. 7). He believes such adaptive responses must be encouraged to evolve in individuals and suggests that "in everyday life of American culture, [they] feel [themselves] buffeted about by unmanageable historical forces and social uncertainties, frequent changes in jobs, residences, life partners, leadership and values" (p. 1). A new and more complex way of defining oneself (the protean self) can be the only response to these changes. This assessment may also be applied to other societies.

In summary, these three books contributed to the beginnings of the development of a new world-view that fits for me. By facilitating a paradigm shift, the ideas presented offer new ways of seeing things within my reality, as well as globally.

For example, in reviewing Capra's ideas, I saw new possibilities for how to improve my job performance based on a more holistic understanding of my interconnection with others like my boss (and the influences she operates within), and my colleagues. Changing my behavior towards the boss may change her behavior towards me. After reviewing Kegan's idea of modernism/post modernism, I recognized how my role as practitioner has become more complex over the years, and how many more influences are now involved in my role. Lifton's notion of the 'protean self' lead me to contemplate why some of my clients appear amazingly resilient in light of their circumstances, while others are not successful at all. Are the resilient ones more able to adapt to complex situations, and if so could we train others to also be more resilient?

Shifts in my thinking prompted me to view my world and my part in it with an enriched perspective. My understanding of the global content and construct necessary to build my model was also beginning to unfold.

A Societal Perspective

Hill (1998, p. 64) suggests that "Western culture is characterized by a world-view that focuses on individualism, independence, entrepreneurial freedom and a capitalist work ethic". When I contemplate the society I live in, I wonder why less value is attached to a farmer who grows food or to a nurse who heals the sick versus an accountant who manipulates numbers or a computer programmer who designs operating systems. The latter two professions are certainly more financially lucrative. Based on this equation of financial earning power with true worth to a community, I wonder if western society values computers and money over personal health and well-being.

I returned to school to enhance my career path and employment options. This focus on employment dominates western society and generates much of the adult education literature. Many adult education programs emerged because people need to gain or maintain employment in an increasingly complex world, and Baskett (1992) suggests the profession itself has developed in part to respond to these needs. Merriam (1993, p. 10) states: "North American adult education has been dominated by a psychological perspective, that is the concerns, issues and characteristics of the individual adult have come to frame our research and our practice".

It makes sense that an individualistic society would use an individualistic science like psychology to guide future study and attempt to explain our learning and knowing processes. Jarvis (1987, p. 11) observes "learning is not just a psychological process that happens in splendid isolation from the world in which the learner lives but is intimately related to the world and affected by it". "What adults apparently 'choose' to learn, their

access to learning opportunities, and, indeed, how they go about the learning process may be as much a function of the sociocultural environment as individual mental process" (p. 12). These views lead me to agree with Hill's (1998) assumptions about this culture's individualistic, capitalistic, employment focus.

Western society is based on a class system, making opportunities to learn readily available to some more than others. In many ways, further formal education is a luxury from which many are excluded. Studies of people who engage in formal learning activities suggest they are generally educated, reasonably affluent, employed, and often professionals. Caffarella and Merriam (1999, p. 2) tell us that "what is interesting is that the original profile put forth by Johnson and Riviera (1965) has changed little over the past thirty years. It appears those who would be most likely to benefit from further education (the poor, uneducated, blue collar or unemployed individuals) are not well represented in educational settings.

Although such studies focus on 'formal' education in a formally organized setting, this 'formal piece' is what I (and I suspect many others in this society) most readily recognize. Western society is more apt to define a single white woman with a Ph.D. in cultural studies, child behavior and linguistics as 'knowledgeable' rather than an immigrant woman who raised six children, assimilated into Canadian culture and learned English. In fact, the social service agency for which I work would assume the 'formally educated' person would assimilate easily into Canadian economy while labeling an 'uneducated' immigrant 'unemployable' with few marketable skills and little chance to participate in the competitive labor market. Learning, knowing, and subsequent value to society are socially defined variables, and cultural definitions *do* impact the recipients of these labels.

Using a similar illustration, I once visited a rural Egyptian Muslim town. As an educated but unmarried, childless woman, I was viewed with suspicion by the inhabitants. I was questioned repeatedly concerning my deficiencies in these areas, some exhibiting great pity for me. This experience led me to suspect that a woman with a husband and children was much more accepted in that society than one with her 'education' alone. The societal labeling process affects me quite differently in Canada than it did in this small town in

Egypt, just as I suspect it does when an 'uneducated' married women with children enters Canada and tries to assimilate into our society.

In summary, society and its labels influence what is learned and known by its participants. Western society is capitalistic, and therefore values an individual orientation. Economics play a large role, impacting 'choices' with regards to participation in formal adult education programs. Societal values (like the capitalist work ethic, financial security, and the value placed on education) also impact perspectives on the field. This review offered a 'societal' perspective on the content and construct necessary to work toward the development of my practitioner's model about learning for knowing.

An Individual Perspective

Psychology, the study of individual behavior, has greatly influenced the field of adult education (Merriam, 1993). The study of individuals, how they learn, what they know, how they know it, and how they behave as a result of what they learn and know is a vast area of scientific inquiry.

According to Merriam and Caffarella (1991), the theories of psychology can be grouped into behaviorist, cognitive, humanist and social learning. Behaviorist orientations focus on measured behavior as the sign of learning (ie: knowledge for action). Cognitive theorists focus on how individuals think, mentally organize information, and make meaning of their world (ie: critical theory). Humanists focus on the ability to control individual destinies; they view behavior as a result of individual choice and learning as a method of reaching individual potential (ie: women's ways of knowing). Social learning theories suggest that individuals learn by interacting with others, and by social observation (ie: situated cognition). As illustrated in the next section, present adult education theories have their roots in one or more of these major schools of psychological thought, hence their relevance here.

Caffarella and Merrian (1999, p. 1) explain "the individual perspective assumes that learning happens internally, and we can construct a set of principles and competencies that can assist all adults to be more effective learners". Three applications of this perspective are the Myers-Briggs Type Indicator (MBTI), The Theory of Multiple Intelligences (Gardner, 1983), and Emotional Intelligence (Goleman, 1995). Each is a unique way of defining and/or measuring individual traits as they relate to the ability to learn, and are examples of the construction of principles and competencies that Caffarella and Merriam speak about. Other authors have examined individual perspectives with a more critical eye.

Kolb (1984) is one of the mainstays of the experiential learning framework in adult education. He states "the basic dilemma for the scientific study of individual differences, therefore, is how to conceive of general laws or categories for describing human individuality that do justice to the full array of human uniqueness (p. 63). How indeed can I view individuals generally when each person is unique? Attempts at developing psychological 'types' and personality 'styles' are criticized because they stereotype rather than explain human complexity and, according to Kolb, are the result of a 'formist' rather than 'contextual' epistemology (p. 64). Having said this, Kolb (1984) went on to develop a detailed model that includes individual variables.

I agree with Kolb's assertion that much of psychology's difficulty results from our lack of a global perception. I also realize that each person is unique, and cannot be pigeon-holed into a particular category, no matter how complex. However, I still require an easily understandable way to organize my reality, which leads to the temptation (and necessity) to initially simplify complex ideas to understand them. For example, if I had to see and identify each piece of mechanical equipment, I might never recognize I am viewing a car.

However simple, I think some practical framework must initially guide my search for understanding, while guarding against the tendency to categorize individuals into broad and limiting 'types'. I have included the individual perspective and some views it represents in my model about learning for knowing because I recognize the necessity to organize (without categorizing) ideas and information to meet my own needs as a learner.

In summary, individual perspectives influence adult learning. At the risk of oversimplifying complexity, authors such as Kolb (1984, Gardner (1983), and Goleman (1995) have developed unique ways of viewing the person, and therefore offer me an individual perspective on the content and construct necessary to formulate my model about learning for knowing.

My Perspective

I have previously mentioned *the 5 Ws and H* method I employ to develop my understanding of the adult education literature existing in the public domain. This method is also applicable when investigating information in the private domain. The following summarizes responses that illustrate my perspective, and is the first demonstration of the methodology utilized in the following section. I focus on learning because the process of 'knowing' to me is interconnected, one variable building on the other in an infinite process.

Who is involved in learning/knowing? For the purposes of this section, 'who' is obviously me.

What is involved in learning/knowing? What I learn is largely dependent on what my external reality dictates, perhaps because I am an extroverted learner. Choices made about learning experiences are pragmatic, directed, and based on previous knowing. I consciously choose to learn based on who I am, and who I wish to become. For example, when I want to get into better physical shape, I learned to do step aerobics, building on my love of music and dancing. When I wanted to work with people, I entered university and studied social work because I knew I needed a bachelor's degree to accomplish my goal. As a child, I was injured. Part of the recuperation process involved swimming to regain my strength. Later, when I wanted a summer job, I enrolled in courses necessary to become a lifeguard, building on previous skills (knowing) I had acquired. An objective often guides my goals. Knowing includes previous learning, and motivates the direction of future learning. To answer this question in a phrase, I learn what I need to learn to do what I want to do, while building on what I already know.

Where does learning/knowing occur? My learning process occurs almost anywhere, usually in relation to what I am doing or which direction I am trying to take. Initially, I defined 'learning' as what occurred in a formal setting, but now I recognize its global nature. Many roads lead to the same destination, and most of my learning/knowing did not occur in school but rather from travel, personal relationships, and the social roles that I occupy. I know in situations where I have contact with others, receive feedback, and recognize the goals I had for the engagement are being met. In my role as a practitioner,

my clients have taught me the most, allowing me to 'know' when I am effectively intervening, and when I need to try another method. I also learn/know with colleagues, teachers, friends, and family. I am predominantly a social learner, understanding theoretical concepts according to their relation to my personal situation.

When does learning/knowing occur? My learning/knowing process is continual, and motivated by internal and external influences. Choices I have made often lead me to embark on new challenges. I approach these new challenges when I identify the need for a change or when I am motivated by external situations. For example, after my parents' deaths, I had to learn how to cope with emotions for which I was unprepared. Crisis causes the most profound learning experiences. My learning has been adaptive, as I learn new methods of coping with circumstances that arise in my life. Knowing leads to further learning, or to repeating previous activities because they worked for me in the past.

Why does learning/knowing occur? I learn/know to increase personal efficacy, to challenge and stimulate myself, or to quench my internal curiosity. I can study or ponder an idea that interests me without realizing the passage of time, or sit with a friend discussing a mutual interest for hours. Establishing a 'connection' with another person also gives me a natural 'high' because communicating on different levels 'feels' immensely rewarding and stimulating. I learn because my external reality necessitates it, although external motivators are not as powerful for me. I learn/know because I have an internal need to succeed.

How does learning/knowing occur? I learn through social contact with others. I know through actions and reflections in relation to a theory I am testing or a goal that I want to achieve. For me, the most valuable aspect of my university education included the practicum and summer experiences I enjoyed during my undergraduate studies. I loved to investigate and then apply new concepts to the 'real world.' I learn experientially, by doing what I study, and informally by watching and copying others whom I identify as 'good' at what they do. I learn from people I can establish a connection with. My predominant learning mode is social: by example, by doing, by modeling and by relating to others, therefore I enjoy a social interactive learning process.

I have answered the pre-determined set of questions using the *5 Ws and H method* as it relates to my personal perspective, introducing the process that is followed throughout the next section of the paper. I thought it also necessary to offer my own definitions of learning, knowing, and practitioner prior to embarking on an examination of these concepts in the public domain. My personal working definitions of these concepts are outlined below:

Learning for me is the ability to take external variables (data, skills, practices, and expectations of others), examine it in relation to internal processes (motivation, interests, abilities and desires), synthesize the two classes of variables, and create a unique understanding of how to accomplish a goal. This goal could be anything from choosing to learn how to do something, solving a problem in my life, adapting to my environment or succeeding at what I wish to accomplish.

Knowing for me is the ability to accomplish a goal. It includes the ability to demonstrate an activity, articulate the process to someone else, solve a problem in life, or adapt to the environment as it unfolds for me. In my mind, both learning and knowing are individual, action-oriented, and infinite processes.

Practitioners are those who are interested and motivated to learn and know in an action-oriented, individual, infinite process within their chosen careers. They include those who choose to engage in a profession or set of tasks, subscribe to a set of philosophies and values, act within their chosen practice, and actively continue their learning for knowing processes. Practitioners are constantly motivated to improve and grow, thus distinguishing them from workers or employees who may occupy the same role.

To Summarize and Continue

The reader now has the 'background' information necessary to peruse the remainder of the paper. I described global, societal, individual, and personal influences that effected my exploration of the adult education field while reflecting on my personal learning process.

After identifying that internal and external influences are a major component of my learning and knowing, I investigated them by going to the public domain. I organized them into four categories to gradually narrow my focus until I returned to the private domain again. *Triangulation* was maintained as I investigated at least three perspectives for each concept. I presented my learning process using this 'broad to deep' organizational method, while also articulating the roles of internal variables, external variables, and my synthesis of the two in my personal development. These concepts form a large segment of the construct and content necessary to develop my practitioner's model about learning for knowing.

The next section will link this theoretical background to ten concepts I have chosen to explore. These concepts are all well represented in the literature existing in the public domain.

IV Literature Review, Synthesis and Critique

This section reviews, synthesizes and critiques, and applies ten concepts selected for inclusion in the construction of my model. I ensured *triangulation* wherever possible by investigating at least three authors who have written about each perspective.

I selected ten concepts that most influenced my understanding of the field, based on a Jossey-Bass publication, recommendations from others, and on my personal interests and background. I limit the review to include only ten in the interest of time, scope of this project, and thoroughness.

The investigation of each concept remains appropriately spaced to illustrate visually and verbally the differentiation made between the three 'voices' that exist within each.

Andragogy

I begin with andragogy because it is one of the oldest and most criticized of adult learning ideas (Pratt, 1993). Also it is the concept from which many of the other concepts that follow in this paper were derived. Andragogy is useful in that it offers ideas that can be identified as uniquely 'adult education-focused' in a field that borrows ideas from many other disciplines. Malcolm Knowles (1980) is identified as one of the major theorists in North America and he defines andragogy as "the art and science of helping adults learn" (p. 43). Synthesized by Merriam and Caffarella (1991, p. 43), andragogy is based on the following five assumptions:

1. As individuals mature, their self-concept moves from a dependent personality toward a self-directing one
2. Adults accumulate experiences, used for further learning
3. Why an adult learns relates to the developmental tasks of their social roles
4. Adults are problem-centered rather than subject-centered
5. Adults are motivated to learn by internal rather than external factors

A key aspect of andragogy is the idea that adults learn differently than children. The concept supports the view that adults are self-directed, experienced, goal oriented, and internally motivated. As such, the concept has been used extensively to define the field of adult education, and to design and orchestrate formal adult education programs (Apps, 1991; Brookfield, 1990; Davis, 1993; Renner, 1994).

Merriam and Caffarella (1991) believe andragogy is a theory based on unique characteristics of adult learners. Pratt (1993) elaborates further by acknowledging adult learning is the process of actively constructing meaning based on the interactive process

of interpretation, integration, and transformation of one's experiential world. He believes learning occurs internally, based on a person's self-concept, prior experience, and perceived needs (p. 16).

My Synthesis

After reading the authors mentioned above and using the *5 Ws and H* method to synthesize their ideas, I note the following about andragogy:

- **Who is involved in learning/knowing?** Adults are viewed in psychological terms. They are seen as separate from their social context. It is assumed adults bring to a learning environment a unique self concept, prior experience, an individual learning orientation, and a readiness and motivation to learn.
- **What is involved in learning/knowing?** Andragogy suggests adults learn by bringing their experiences, knowledge and skills to the learning environment. Facilitated by an educator who is aware that these prior experiences exist, the learner is able to use previous resources to continue to learn. Internal motivation and self-direction are assumed.
- **Where does learning/knowing occur?** Learning occurs through experiences from which adults internalize what they have learned. It is dependent on each person's self-concept, prior experience, and perceived needs. Learning is based on the person's interpretations of these influences, not on the experience itself.
- **When does learning/knowing occur?** Formal learning occurs best when situated in a learner-centered arena that acknowledges the self-directed nature of adults based on their prior experiences and learning goals.
- **Why does learning/knowing occur?** The motivation to learn is not well defined by the concept, although it appears to be loosely attached to the necessity to solve a problem related to the person's role or current situation.

- **How does learning/ knowing occur?** Learning occurs when the learner identifies learning needs, generates learning goals, and evolves evaluative criteria. With this insight researchers have concentrated on instructional design that best delivers formal educational programs for adults.

Learning according to Pratt (1993) is not well explored. He states: "there has been virtually no attempt to clarify the central concept of learning" (p. 16). Indeed, how adults learn is not the central focus of this orientation. Many of these authors suggest learning would best be defined as the ability to problem solve, or adapt to each life role one finds oneself in. An underlying assumption is that learning has occurred if such an adaptation could be seen to have occurred, or a specific problem has been solved. As Pratt states "learning is seen as a construction of meaning through experience, it is subjective and interactive" (p. 21).

Knowing from andragogy's perspective is also not addressed. Pratt (1993, p. 22) suggests "andragogy is seen to be not so much an explanatory theory about learning as a philosophical stance with regard to the purposes of adult education and the relationship of the individual to society". How one 'knows' is not central to this perspective.

Practitioners are also not defined. Adults are seen in a general sense, and andragogy does not endeavor to distinguish between them. The theory appears to expand the humanistic theories of psychology, offering us general assumptions about all adults. It also offers a guide for structuring adult educational environments, therefore does not differentiate between different 'types' of adults.

My Critique

In my opinion, andragogy's greatest contribution to the field of adult education is its exploration of appropriate and meaningful learning environments. It is a humanistic philosophy that discusses creating climates conducive to adult learning, and it concentrates specifically on adults and their self-directed needs. I also value its idea of learning as an internal process, based not on what the person experiences, but rather the interpretation the person makes of that experience.

I do find its assumption of prior learning and motivation problematic in certain situations, especially those where I cannot identify prior learning or motivation in myself as a learner. I will use a personal example to illustrate my point.

As a social worker early in my career, I found myself in a computer class, without any prior computer experience, or motivation on my part to learn. My employer was initiating a huge project where all the client information was to be stored on a provincial database. In this situation, I lacked prior learning, and initially also the motivation to learn. Allowing me to create my own questions and direct my own learning would have paralyzed me at that time. I had absolutely no direction to follow.

Andragogy assumes I would be more successful in a supportive and encouraging study environment, however I also craved direction and information. In the early stages, I did not even understand the knowledge I lacked, so how could I choose to learn it? I was an unwilling participant in the learning process, and was told I would learn because my job depended on it. In reality, many employees have similar experiences, which is why I question these specific assumptions.

In summary, my understanding of andragogy offers answers to the following three questions and will be presented under this concept later in the visual model:

- **Who:** Who am I and what do I bring to this learning experience? Who do I want to learn from/with? Do I want direction from an outside influence like an instructor or other students, or do I want autonomy and self-direction?
- **Where:** Do I want a formal learning experience, or an informal one? Do I want a classroom setting, a group setting, an experiential environment or something else?
- **When:** Is this a good time in my life to learn? Do I have any prior learning that I could apply to this situation? Am I motivated to learn internally or externally, and could re-defining my motivation increase my ability to learn?

Transformational Learning

Transformational learning involves a specific type of learning that produces significant, far-reaching, and drastic changes in the learner. Learning changes people, such that they are noticeably different to themselves and others. Clark (1993) writes "transformational learning is, in short, a normal part of our lives and intimately connected to the developmental process" (p.47). Daloz (1986), Friere (1973), Hamilton & Cunningham (1980), and Mezirow (1990) have also written about transformational learning, each offering their own unique perspective on how learning occurs, and why.

Mezirow (1990) examines personal development and how people make meaning from their experiences based on their beliefs, theories and assumptions. Transformation occurs when people identify their assumptions, reflect critically on them, and form a more inclusive perspective, producing for them a transformation in their thoughts. Daloz (1986) sees learners' transformations as the result of caring relationships between students and teachers. Freire (1973) explores transformational learning with the goal of social change, and seeks to liberate people who exist in oppressive social structures. Hamilton & Cunningham (1989, p. 445) see learning as necessary to "develop a capacity to transform reality, to strengthen organizational structures and to challenge existing power arrangements".

My Synthesis

After reading the authors mentioned above, and using the *5 Ws and H* method to synthesize their ideas, I note the following about transformational learning:

- **Who is involved in learning/knowing?** Adults are rational, autonomous, and free to think and act. They possess beliefs, theories, and assumptions, and are able to identify and critically reflect on them.
- **What is involved in learning/knowing?** Learning is a complex, internal, subjective creation used for different purposes. Knowing occurs when information is gathered, tested through human interaction and communication, and found to be valid. Information, ideas, and situations change, therefore interpretations of reality are constantly evolving/transforming.
- **Where does learning/knowing occur?** Learning and knowledge construction occurs internally based on the learner's interpretations of their beliefs, theories and assumptions. Adults create and are created by their social realities.
- **When does learning/knowing occur?** Learning/knowing occurs based on the developmental process and when the learner takes personal responsibility for this development. Learning is sometimes viewed as a step toward personal empowerment. Knowing occurs when reliable information is gathered, tested, and found to make sense in view of current reality.
- **Why does learning/knowing occur?** Learning is necessary to be able to transform individual reality, to strengthen organizational structures, and to challenge the existing social stratification. To know is to become emancipated by making reality functional based on the adult's context. Actions are taken and thoughts formed with goals of personal growth, development, and empowerment.
- **How does learning/knowing occur?** Adults learn and construct ways of knowing by interpreting experience, identifying this interpretation, critical reflection, forming new constructs, and finally testing them until they are seen to be reliable. Changing interpretations alters the experience and adds to understanding.

Learning according to Mezirow (1990, p. 1) is defined as "the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation, and action." He believes that "what we perceive and fail to

perceive and what we think and fail to think are powerfully influenced by our set of assumptions that structure the way we interpret our experiences" (p. 1).

Knowing as defined by Mezirow (1990, p. 51) is "a highly rational process whereby the underlying premises of ideas are assessed and critiqued, and new conclusions are formed and validated through rational discourse until they can be seen as reliable". Knowing is also seen as 'meaning-making', constructing meaning to make sense of our world, and an integral part of growth in adulthood. Adults 'know' when their constructed reality makes sense in relation to their environment.

Practitioners are not defined. Theorists in the area do not separate practitioners from the rest of society, although the concepts apply to this group as they do to all others. Adults can create/recreate their reality so it makes sense to them, although the context is unspecified.

My Critique

On reflection, I realize that I use this process in my role as a practitioner, although not always consciously (i.e. my tacit knowledge, if made explicit, enables others to understand the process and use it in their situations). To illustrate this idea, I use an example of my work as an employment counselor:

> I help people find employment. The process of becoming unemployed and remaining unemployed can be devastating to one's self-esteem, especially if it effects the person's ability to take care of themselves or their families. The difficult task for the counselor (and even more difficult for the client) is to examine the question of why they remain unemployed. The critical thought steps that I follow in my practice with them are roughly as follows:
>
> 1. identify assumptions (*I know how to find a job, and support my family*)
> 2. investigate them in relation to the current situation (*I have not been able to find a job, and my family is suffering*)
> 3. critically reflect (*why can't I find a job? Do I lack education, employable skills, relevant experience or social skills? How much control do I have over the situation? Am I the victim of discrimination, or some other negative labeling in society?*)
> 4. generate new alternatives (*what else could I do to find a job that I did not consider before? Are there other solutions I have not yet thought of? What other occupations would be better suited to who I am, and what I have to offer?*)

5. review the choices (*I could return to school and take a class, I could learn new ways to write a resume, talk to a job search coach, read a book or build more skills in the area*)
6. choose from the identified options (*I think I must return to school to do what will make me happy, and support my family*)
7. follow through based on each choice's relevance to the circumstance (*I will investigate the school and the course I wish to take, research funding alternatives, and begin to plan a new life as a student rather than an employee.)*
8. validate the action (*I'll enroll in school, organize funding, and begin to attend)*
9. get a job (*after this course, I will be able to get a better job than I would have before, and I'll be more likely to get it with this education)*

Applying the concept of transformational learning to my work, using my nine distinct stages as outlined, the process will ideally create a 'transformed' person. This 'new' person is one who is now more knowledgeable about how to solve the problem (*find a job*). Making this process conscious creates new skills, which results in learning. Once identified as such, the learning process can then be used to solve other problems (*I found a job by returning to school; I could use the same method to learn how to get a raise or a promotion*). In this way, a person who now subscribes to the life-long learning philosophy emerges, transformed from someone who simply needed to find a job.

In summary, my understanding of transformational learning offers insight into the following areas and will be presented under this concept later in the visual model:

- **How:** Do I learn by critically reflecting on and then changing my subjective interpretation of my experiences? Could such a process help to give me new insights and ways of dealing with old issues? Could such a strategy 'transform' how I view my professional life and further my opportunities?
- **Why:** Do I learn to become aware of meanings I have made for myself and challenge those meanings? Could I generate new and more functional ones that allow me to do what previously may have seemed impossible? Does this offer me a greater sense of freedom?
- **Knowing:** Do I know when I use a rational process of investigating an idea, critiquing the idea, and forming a new conclusion? Do I validate my conclusion through rational discourse with my environment? Is this how I identify that I know what I know?

Experiential Learning

Experiential learning is often described as a model in the adult education literature. Kolb (1984) depicts learning as a four-part process: Learners have *concrete experiences*, which lead to *reflective observations*. These observations lead to *abstract conceptualizations* that are used to create principles, generalizations or theories. The testing of these theories, through *active experimentation*, is used to guide further action and testing in more complex situations, thereby creating new *concrete experiences*.

Since Kolb's (1984) work, other authors have expanded and refined his ideas. Lewis & Williams (1994) define experiential learning as learning from experience or learning by doing. "Experiential education first immerses adult learners in an experience and then encourages reflection about the experience to develop new skills, new attitudes, or new ways of thinking" (p. 5). Jackson & Caffarella (1994, p. 20) propose their own model that adds a portfolio component. The concept has been applied to classroom situations (Chickering and Gamson, 1987), college settings (Claxton, 1990), and to gender-related learning style preferences (Belenky, Clinchy, Goldberger, & Tarule, 1997).

According to Lewis & Williams (1994) multiple experiential learning techniques have emerged, all sharing certain characteristics. "Each is intended to encourage investigation and open-mindedness and to promote practice with important, previously identified skills and behaviors" (p. 14). Each mode inspires questions and encourages viewing issues from various perspectives based on others' input. "Practical applications to real-life situations are considered the responsibility of the learner" (p. 14).

My Synthesis

After reviewing Kolb (1984) and the subsequent writers mentioned above, using the *5 W's and H* method to synthesize their ideas, I note the following about experiential learning:

- **Who is involved in learning/knowing?** Learners with experience, knowledge, differences in the processes of learning, and active involvement within the context of life are engaged in the process of learning.
- **What is involved in learning/knowing?** The learning and knowing process involves adaptation in adults, and is best seen as a process rather than as an outcome. It involves experience, knowledge, individual ways of learning, active involvement, and the testing of formulated theories.
- **Where does learning/knowing occur?** Learning occurs inside the adult's environment. Environments affect learning, and learning cannot occur independent of the environment the adult exists within. Knowing occurs when the learner can synthesize the variables into a theory, test it within one situation, and recognize it also works in other situations.
- **When does learning/knowing occur?** Learning occurs based on the adult's adaptive needs, and is dependent on the life role(s) occupied. Learning is a continual process, and is seen as the movement toward increasing complexity and total understanding.
- **Why does learning/knowing occur?** Learning occurs to continually adapt one to changing environments and realities. Knowing occurs when prior information and development is integrated with new experience and remains applicable to the new situation.
- **How does learning/knowing occur:** Learning can be described as a cycle involving adaptive actions based on experience, reflection observation, theory-construction, and continuous experimentation. Experimentation leads to further experience, reflection, etc. in a continuous process.

Learning is defined by Kolb (1984, p. 38) as "the process whereby knowledge is created through the transformation of experience". He focuses on adaptation and process rather than outcomes or content. Learning subjectively and objectively transforms people's experiences. Learning is strongly connected to knowledge and vice versa because, in a cyclical progressive process, what adults learn affects what they know which affects what they learn.

Knowing, then, is directly related to learning. Kolb (1984) defines four types of knowing: divergence, assimilation, convergence and accommodation. These types are based on people's preferred learning methods, and explain how people choose between opposing methods to adapt to their circumstances. According to Jackson & MacIsaac (1994), the definition of knowing has expanded to "one which is tentative and socially constructed", and the definition of knowledge has expanded to "gaining an in-depth understanding and critical skills" (p. 18). Knowing is the process of testing theories against experience.

Practitioners are termed 'professionals' by Kolb (1984, p. 182). He defines professionals as "those whom it is not feasible to judge performance on the basis of outcomes." One cannot judge a doctor based on whether the patient recovers, for example. Professionals also include people who have a collective 'mentality', comprised of knowledge, skills and attitudes, including ethics and standards, and who have a collective view of appropriate behavior, correct ways to think, and a criteria to judge value. The professional collective reviews its members based on pre-defined values, definitions of good and bad, and appropriate methods of thought and action. A person who thinks and acts like a doctor is a doctor according to the profession's own definition.

My Critique

I believe that experiential learning has numerous applications to the field of adult education, and therefore offers a more complete understanding of how adults learn and know than other ideas explored at this point in the paper. I also appreciate Kolb's (1984) concept of infinity, the never-ending process that learning is to me personally. The learning process is both clearer and more complex after examining this view.

Applications of experiential learning are illustrated in studies of professions, students entering these professions, learning methods of both students and professionals and how

success can be predicted. I find myself understanding my role as a career counselor in relation to this model. A personal example helps illustrate this point:

> In my present occupation I am mindful of the process of choosing or changing one's profession. When making a career change or even applying for a new job, I advise my clients to identify 'transferrable skills' that they may apply in new areas. These skills can be presented inside a portfolio, which they may then use to market themselves to employers.
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> Constructing a portfolio (or a resume in a simpler form) is a learning process represented by the experiential learning model. It includes gathering evidence of related experiences, reflecting on the relevance of these experiences, and identifying what components the learner could apply to a new situation. It encourages learners to reflect, learn about their own skills, and see for themselves what they have to offer employers.
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> A housewife returning to the workforce after an extended absence is empowered by her recognition that she has highly 'employable' skills. A typical list may include organizational, time management, nurturing, financial planning, budgeting, forecasting, inter-personal, conflict resolution, mediation, and personnel management skills for example. Generating a list such as this is part of a process I follow when helping clients to create or revise their resumes and portfolios.

In summary, my understanding of experiential learning offers insight into the following areas and will be presented under this concept later in the visual model:

- **What:** What do I learn as a practitioner? Do I learn things that help me adapt to a changing environment? Do I learn what I need to further my career or remain successful in my present one?
- **How:** How do I learn it? Do I learn by experience, reflection, theory formation and experimentation? Is my learning a cyclical progressive process?
- **Learning:** Is learning the process of creating knowledge through experience? Is it adaptive for me? Does it objectively and subjectively transform my experience? Does what we learn affect what we know, and does what we know affect what we learn?
- **Practitioner:** Am I a practitioner (professional)? What does that mean? Do I have a 'mentality', comprised of knowledge, skills and attitudes, ethics and standards that are similar to others in my profession? Collectively do we have a similar view of appropriate behavior, correct ways to think and criteria to judge value?

Situated Cognition

The thoughts of an adult are always attached to that person's external context. This is the viewpoint of situated cognition. Rogoff (1984, p. 3) states "context is an integral aspect of cognitive events, not a nuisance variable". Therefore, to understand learning and knowing, the intricacies of human activities in a specific setting must be understood since they fundamentally structure how learning and knowing occur (Resnick, 1987). Without the setting and the activity, we cannot understand the cognition.

Schon (1983) discusses the concept of 'reflection-in-action.' He states that the most meaningful learning occurs as professional practitioners engage in the activity of their profession in the everyday world. Practitioners do not apply well-constructed theories to well-understood problems to produce predictable results. "Professional practice, therefore, is not instrumental problem solving made rigorous by the application of scientific theory and technique" (p. 21). He is joined by Lave (1984) and Resnick (1987) who say that learning must thus be achieved in authentic activity, perhaps even removed from the classroom.

My Synthesis

After examining the writings of the above authors and using the *5 Ws and H* method to synthesize their ideas, I note the following about situated cognition:

- **Who is involved in learning/knowing?** The terms practitioners and professionals are used interchangeably. Practitioners are adults with specialized skills premised on underlying theory(s). Study tends to focus on practitioners who practice a specified skill or group of skills, usually within a certain occupation.

- **What is involved in learning/knowing?** Learning and knowing are discussed in action terms (i.e. what people do and how they do it). Tacit knowledge (knowledge that the learner is not explicitly aware of), reflection-in-action (the activity of thinking on one's feet), and authentic activities (activities that are not removed from their context) are also central themes.

- **Where does learning/knowing occur?** An authentic situation is key to learning, providing the framework for practitioners to organize thoughts and behaviors crucial to their ability to perform their job. Learning/knowing must occur in real activity, and transferability of skills from one activity to another cannot be assumed.

- **When does learning/knowing occur?** Learning/knowing is specific to the task or situation and thus occurs while people are performing identified jobs and subsequently/ simultaneously reflecting on the results.

- **Why does learning/knowing occur?** Although not central to this theory, learning appears to occur to enable individuals to 'practice' their task more effectively (eg. to be effective practitioners). Motivation or lack thereof is not addressed.

- **How does learning/knowing occur?** Situations provide learners with a construct or model to organize *all* variables, including environmental factors, tools, thoughts, feelings, reflections, knowledge, behaviors, and many others whose interrelationships are impossible to isolate or measure. This individual construct (often not identified or recognized by the person) provides a coherent method of learning/knowing that is unique and functional for that person in that situation at that time.

Learning as defined by Schon (1993) as 'reflection-in-action'. The situation provides practitioners with the construct necessary to organize their behaviors and thoughts and allows reflection on these to produce the desired results. How people learn is not dictated by individual characteristics or traits (the psychological model), but by situations learners find themselves in and their consequent behavior. "It is the activity itself that structures and brings meaning to the learning" (p. 76).

Knowing from the situated cognition perspective is also highly context-specific and results only after repeated practice in applied settings. The process of trial, retrial, experimentation, intuition, and reflection results in eventually 'knowing' how to accomplish a task. Knowledge results from acting *in* situations, not acting *from* situations. The situation *and* the learner's reactions to it create knowledge. Schein (1973, p. 43) suggests "professional knowledge is comprised of an underlying discipline or basic science, an applied science or engineering component, and a skills and attitudinal component".

Practitioners are the primary focus of this perspective, and the term applies to those who perform a specific duty or job, such as physicians, lawyers, plumbers, students, and even grocery shoppers (Jarvis, 1987; Schon, 1983). Essentially, because of the action-oriented nature of this view, only those who can be identified as 'doing something' are studied. These 'doers' are referred to as practitioners/professionals.

My Critique

Situated cognition's most significant contribution to the field of adult education is that it makes explicit ideas that most people can identify with. Physicians undertake residencies, law students article, social workers do practicums, and welfare recipients engage in work experiences. All operate on the premise that we learn to do by doing. Most professions attach work experience modules to educational experiences to facilitate transferring learned concepts to the 'real world'. Other applications of situated cognition include learning a new language by immersion, and learning a trade through apprenticeship.

My university and professional experience validates my understanding of situated cognition. I will use these personal examples to illustrate this point:

> In my own preparation for the field of social work, I felt I learned more from professors who practiced in the field than from those with a research focus. I certainly found the practicing professors more interesting and informative because I could relate to their real world examples discussed in class. I also learned more about social work practice from my practicums than from the readings and classes. My understanding expanded further when I left school and entered the profession, and continues to build with experience. This is a direct application of the concept of situated cognition, in that my learning process was facilitated by my involvement in the 'social work situation'.
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> I currently develop work experience opportunities for welfare recipients. This is the most rewarding aspect of social work I have performed because it works. I

can see noticeable changes in the participants as they 'grow' in observable ways during the project. When compared to other government courses, workshops and training opportunities aimed at helping people transition to the competitive labour market, work experience programs demonstrate their effects on my clients in ways that are literally visible to me. I have actually failed to recognize clients who have worked in a professional atmosphere for a period of time since they 'appear' more 'professional' after their immersion into such a learning environment. Folk wisdom dictates that people learn to be dependent in a dependent situation and learn to work in a work situation. Situated cognition offers an explanation for this phenomenon, while offering me an understanding about why my present job is so rewarding.

In summary, my understanding of situated cognition offers insight into the following areas and will be presented under this concept later in the visual model:

- **What:** Do I learn what I am immersed in, either professionally or personally? Does my situation dictate what I learn and know? Do my experiences directly effect my learning and knowing processes?
- **Where:** Do I learn within my chosen situation? Do I use the context as a framework to organize my thoughts? Does the context provide me with this framework?
- **When:** Do I learn by using my situation to construct a method to organize all variables, thereby learning holistically? Do I learn when the opportunity presents itself to do so?
- **Practitioner:** As a practitioner (professional) is my method of learning and knowing related to my position? Does what I do professionally impact what I learn and how I know? If I were in a different profession, would my method of learning and knowing also be different? Do other practitioners learn the same way I do because they are in a similar situation?

Critical Theory

Habermas (1972) is a founder of critical theory, and subsequent authors have expanded on his views (Mezirow 1990; Welton 1993). Habermas proposed three types of knowing: *technical* (related to labor and human interaction with nature), *practical* (related to understanding how humans interact with each other, make meanings, and reach consensus), and *emancipatory* (derived from the human desire to be free from domination). Mezirow (1978) has been credited with introducing Habermas' concepts to the field of adult education. He writes that "Habermas has established beyond the shadow of a doubt, the existence of three different learning [for knowing] domains, each governed by a particular knowledge interest" (p. 143). Welton (1993, p. 83) further expands the ideas by suggesting "knowledge is the outcome of human activity motivated by interests that guide and shape their learning processes". From an adult education perspective, critical theory offers an important well-defined purpose, "allowing the profession to define itself as a field that truly enables human beings to unfold their potential (cognitive, moral, technical, aesthetic) in their daily routine interactions" (Welton, p. 89). These ideas expand the role of adult education in western society, by suggesting that education must be about more than just teaching adults how to adapt to their environment.

This concept contributes to a more inclusive and holistic view of reality and introduces an emancipatory goal to the field of adult education. Adults are seen as constantly struggling to be free of constraints, and to live their lives without external domination. The role of adult education is to help realize this goal.

My Synthesis

After reading the authors mentioned above and using the *5 Ws and H* method to synthesize their ideas, I note the following about critical theory:

- **Who is involved in learning/knowing?** Everyone operates inside some sort of hierarchical structure that influences their learning and knowing processes. This view includes all humanity on global and historical levels.
- **What is involved in learning/knowing?** There are three basic types of knowing, although emancipatory knowing is central to this perspective. All knowing results from the human need to interact with the environment and others without being slaves to external influences.
- **Where does learning/knowing occur?** Although the context is unspecified, learning occurs among all humans. Social stratification and cultural influences shape individual members in every social group.
- **When does learning/knowing occur?** Learning/knowing has occurred throughout history, although new knowledge builds on the knowledge of predecessors (cumulative effect).
- **Why does learning/knowing occur?** Learning occurs because people must earn a living (meet basic needs), interact with others (social and cultural variables, meeting needs to belong, get along, etc.), and free themselves from control by their external environment (emancipatory needs).
- **How does learning/knowing occur?** Adults learn by generating and applying technical, practical, and moral knowledge. The emancipatory interest is a derivative of the others and the most important. How this occurs is not the central focus, it appears the authors assume it is an innately human method of adapting to one's situation.

Learning is defined by Mezirow (1990, p. 1) as "the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, apreciation, and action". Welton (1993, p. 83) states "Human beings learn through the

generation and application of technical, practical, and moral knowledge". He believes there is cumulative growth in technical and scientific knowledge, and there are also changes over time in our beliefs, values, and rules governing our interactions.

Knowing, according to Kitchener & King (1990), is a seven-stage process. "Knowing evolves from a concrete, single-category belief toward increasing complexity until it becomes uncertain and subject to interpretation, although the authors argue that a better or best solution to the problem is under consideration" (p.162 - 166). Mezirow (1990, p. 15) expands this idea to suggest "people can become active, reflective, and develop multiple-faceted understandings of themselves. However, institutions and values may prevent us from acquiring these competencies without the ability to reflect critically and thus recreate these influences for ourselves".

Practitioners are not isolated in critical theory. People can generally adapt, critically reflect on their experiences and lives, and change external influences that may limit available options.

My Critique

Critical theory introduces an emancipatory goal to the field of adult education, suggesting that practitioners must foster the development of critical thinking skills in adult learners. The ability to think critically allows for the identification and generation of new courses of action/thought that may actually change social reality, not just allow learners to live within it. I will use a personal example to illustrate this point:

> At one point in my career I was employed as an Employment and Client Support Worker. Political pressure at that time was clear, our job was to reduce the 'welfare' caseloads. Under the guise of helping clients gain and maintain employment, and becoming free of the constraints of welfare dependency, we were influenced to cut people off assistance. The real reason was of course to save the government money in transfer payments.
>
> I had not labeled myself as an 'instrument of social control' at any point in my career although upon reflection, that is what I was. Without regard to the client's best interests, I was paid to decrease the surplus population. In some situations, I truly helped people to better themselves but in others I simply added more stress to an already volatile situation. I hated the job in those days, without really understanding why.

> My feelings at this time lead me to pursue further education so I would have more choices and not feel trapped in a position I didn't want to be in. I was using the concepts of critical theory to make my decision and this process led me to leave. Furthermore, it helped me to chose adult education, because I wanted to have more ability to empower people to improve their lives. The concepts outlined in critical theory help to make sense of nagging moral issues that plagued me while empowering me to free myself from that situation.

On a final note, my understanding of this concept evolved to eventually provide me with an enriched method of organizing my thoughts as they relate to the field of adult education. As a result, this perspective has emerged as a theme that is illustrated throughout the paper.

I choose to represent my understanding of critical theory in the visual model such that it was consistent with other sections. Therefore, I suggest it offers the best answers to the following:

- **What:** What do I seek to learn and know? Do I wish to obtain more technical, practical or emancipatory skills? Can I group them this way? Are there three types of knowledge, and can everything be included in one of these three areas?

- **Why:** Why do I want to learn? What motivates me to further study or to make significant professional changes? Do I seek to be free? Do I seek to enjoy more choices in my life? Do I wish to generate novel ideas that produce options previously unavailable to me?

- **Learning:** Is learning the process of meaning-making, using experience and revising interpretations of the meaning of these experiences to create new options? Is the most important goal of learning to become free from real or imagined constraints, whether they be external or internal? Is this my role in adult education?

Knowledge for Action

'Knowledge for action' was initially explained in a book of the same name written by Argyris (1993). He suggested that knowledge is most useful when it is 'actionable' and thus applicable and identifiable. He introduces the concept of 'single loop' (action strategies producing consequences, consequences producing action strategies) and 'double loop' (adding governing values) learning. He also identifies various individual defense strategies that *prevent* real change from occurring (p. 50). While the other concepts outlined here discuss how learning occurs and under what conditions, knowledge for action identifies why learning and growth may *not* occur.

Schon (1983) sees knowledge as intricately linked to action. He thinks that knowing is the ability to act and suggests that knowledge consists of "actions, recognitions, and judgements that we know how to carry out" (p. 54). Practitioners do not have to think about their actions prior to their performance, they are often unaware of having learned to do these things, and simply find themselves doing them. "We are unable to describe the knowing which our action reveals" (p. 54). Leonard-Barton (1995) point out that "espoused theory tells us little about real behavior; we need to study 'theory in practice' – that is view the actions that reflect managerial attitudes and values" (p. 5).

Argyris, Schon, and Leonard-Barton all attempt to identify thoughts and actions as they exist in organizations. Their intent is to increase organizational effectiveness. This is the only concept that discusses adult learning and knowing from an organizational perspective, although I believe these ideas also apply to individuals. Real action and real

results are measurable indicators of success, (thus differentiating them from previous perspectives reviewed), yet their applicability to individual practitioners remains.

My Synthesis

Examined using the *5 Ws and H* method to synthesize these ideas, I note the following about the concept of knowledge for action:

- **Who is involved in learning/knowing?** This view focuses on employees in the workplace. Although learning/thought processes are similar regardless of level, (they apply to individuals, groups and organizations), the concentration of study is on the latter two levels. Applying these ideas to the individual, one can examine behaviors, and thereby recognize the 'underlying' thoughts that may generate these behaviors. For a succinct explanation of this perspective, I draw upon the folk wisdom that says 'actions speak louder than words'.
- **What is involved in learning/knowing?** Single-loop learning, double-loop learning, theory-in-use, and espoused theories are all new concepts introduced by this perspective. *Single-loop* learning is defined as actions that produce consequences and consequences that produce actions. *Double-loop* learning adds the component of governing values and is presumed more functional. *Theories-in-use* are those that people actually use to design and implement their actions, and are differentiated from *espoused theory*, which people simply report or describe.
- **Where does learning/knowing occur?** Learning occurs within individuals situated in organizations. Learning can only be presumed to have occurred if it results in actions or changes in actions. Productive learning can only happen in the absence of external and internal defense strategies.
- **When does learning/knowing occur?** Learning occurs when an organization or individual chooses to learn to produce valid information, make informed choices and monitor the implementation of identified changes. It occurs optimally when defense mechanisms are lessened or nonexistent.

- **Why does learning/knowing occur?** Individuals can be encouraged to engage in *double loop* learning to improve their individual performance within a company. This type of thought leads individuals to accept more responsibility for decision-making, and also stimulates the generation of new ideas to the mutual benefit of others and themselves.
- **How does learning/knowing occur?** Learning occurs by identifying external and internal defensive patterns, and then decreasing these defenses. This is accomplished by encouraging inquiry and testing people's actions. It is not enough to simply advocate, evaluate, or attribute outcomes. Without defenses, actionable knowledge can be produced and acted upon.

Learning is an action concept according to Argylis (1993). "Learning is not simply having a new insight or a new idea. Learning occurs when we take effective action, when we detect *and* correct error....learning is intimately connected with action" (p. 3).

Knowing is the ability to produce/demonstrate what a practitioner knows. It is identifiable, measurable and visible to others. Schon (1983) says "we actually know something when we can demonstrate it via our actions" (p. 54). It is not enough to be able to articulate, explain, or describe knowing. Knowing is seen as 'reflection on action' where a practitioner acts, reflects on the act, and uses that reflection to guide subsequent acts.

Practitioners might be loosely defined as participants in organizations. Argylis (1993) concentrates on management and supervisory staff, although his concepts apply to all.

My Critique

Knowledge for action offers another perspective which is important to the field of adult education because it begins to explain why individuals and organizations may *not* learn or demonstrate their 'knowing'. These authors have identified causal factors that begin to explain an occurrence that others have not addressed. I do think they neglect to recognize other plausible reasons for inaction (individual variables, external influences on the organization, internal personalities and politics etc.). However, they do ask the question, identify the phenomenon, and have begun to explore potential explanations for why people and organizations do not learn/know.

I appreciate a number of concepts that knowledge for action contributes to my understanding of my own learning process. I found its explanation of tacit knowledge (knowledge that exists in a person, but that may not be conscious or easily articulated), theory-in-use, and reflection-in-action particularly enlightening. The following personal example explains:

> At various points in my career, I have taught new colleagues to do what I do. This becomes a thought-provoking process and is always a learning experience for me. As I teach, model, and explain my actions and judgements, I have to think about what I do and why I do it. Identifying my thought processes and reasons for behaving in this way in this situation, but that way in that situation is very difficult. I recognize much of my skills and knowledge is tacit, and it is challenging to have to explain such 'ways of knowing' to a new practitioner.
>
> Mentoring allows me to educate both myself and my student. Sometimes I feel that I learned more than they did. This feeling can be explained by recognizing that I am engaging in a process of making my *theories-in-use* conscious by identifying, explaining, and examining them anew. Often I have not recently engaged in this type of reflection, which explains why I learn so much by teaching. Knowledge for action offers an explanation for this phenomenon.

In conclusion, my understanding of knowledge for action offers insight into the following areas and will be presented under this concept later in the visual model:

- **Where:** Do I learn from my employment situation? Am I reactive to various managerial styles as I am learning? Can I identify defense mechanisms in myself/my superiors/ the organization? Are my theories- in-use reflective of actual program goals and objectives? Are the values I have congruent with those of the organization? Have I learned more functional behaviors in spite of the presence of defense mechanisms in myself and others?
- **When:** Do I learn when I am at work? Do I demonstrate knowing there? When do I engage in single loop/double loop learning, and is this situation specific? Under what circumstances am I more likely to reflect-in-action? Are there work situations where I am more likely to identify my theories-in-use, like when I teach, when I speak to external organizations or when I attend conferences with other practitioners in other organizations? Does my organization encourage reflection-in-action? Is this encouragement more evident in some situations than in others?
- **Knowing:** Do I know only when I choose to demonstrate actions, recognitions and judgements, or could I know without making this choice? Is it possible to know how to do something but not demonstrate it? Can I really know if I am unable to articulate the knowledge? Is the ability to do something knowing, or is there more to knowing than demonstration of ability?

Women's Ways of Knowing

Women's ways of knowing, or feminism in adult education "emphasizes teaching women to take more control over their lives; concentrates on connections and relationships rather than competition and separation; and focuses on developing women's sense of personal power" (Tisdell, 1993, p. 93). Women's emancipation is the major thread of this concept. Much of this thought builds on previous theorists who also identified emancipation as a central goal of adult education (Freire, 1973; Daloz, 1986; Habermas, 1972). The theories can be divided into two main areas of concentration: 1) they may seek to enhance personal empowerment or; 2) they seek to decrease oppressive societal constructs.

Belenky, Clinchy, Goldberger & Tarule (1997) suggest that with appropriate (connected learning environments and teaching methods) education, women see themselves as creators of knowledge, which is more likely to lead to their development of a unique 'voice' and, ultimately, social action. Women do well in environments that focus on cooperation and connections with others, where attempts are made to apply theoretical concepts to real life examples. Tisdell (1993, p. 98) agrees that "women have been seen to do better in learning environments where there is an effort to relate theoretical concepts to real-life experiences. "Feminism is grounded in sociocultural context, especially as it relates to power imbalances and the learning process, and includes other 'oppressed' members of society such as minority racial groups and members of lower classes" (Hugo, 1989).

My Synthesis

After reading the authors mentioned above and using the *5 Ws and H* method to synthesize their ideas, I note the following about women's ways of knowing:

- **Who is involved in learning/knowing?** Although the central focus is on women, this concept also includes other members of oppressed groups such as people who are oppressed because of class or ethnic origins.

- **What is involved in learning/knowing?** Learning is the process of building on a previous way of knowing until women can 'integrate the voices' to form a unique personal knowledge applicable to them and others. Belenkey et. al. (1997) propose five stages of knowing: *silence, received knowledge, subjective knowledge, procedural knowledge, and constructed knowledge*.

- **Where does learning/knowing occur?** Women learn inside their personal and social situations, especially with regard to the roles they occupy in relation to others. Women must be encouraged to make their knowledge explicit by developing their societal 'voice'; in other words taking their personal knowing to the public domain.

- **When does learning/knowing occur?** Learning occurs inside relationships with others. Personal (internal) ways of knowing are made public (external) in environments of cooperation and connection where members are encouraged to identify their own methods of learning and knowing.

- **Why does learning/knowing occur?** The goal of learning is to develop a 'voice' or an explicit 'way of knowing' that leads to emancipation. This process decreases oppression while increasing participation and power in mainstream society.

- **How does learning/knowing occur?** Learning occurs by fostering cooperative, connected learning environments that encourage critical reflective thought, allowing members to relate theoretical concepts to real world examples. Knowing occurs by increasingly becoming more powerful inside one's personal and societal domain.

Learning evolves from disempowerment (where women feel they have nothing of value) toward empowerment (where women can integrate affect with information, critically analyze multiple points of view, and construct a uniquely personal meaning for their lives). Learning is a five-step process beginning from *silence* and moving toward *constructed knowledge*, which integrates knowledge gained from others with knowledge intuitively deemed important (Belenkey et. al. 1997). Learning is a process of integrating objective and subjective information to develop a unique way of making sense of the world, then making this process explicit.

Knowing refers to the process of organizing thoughts, feelings, and information into a coherent model of understanding that helps make sense of the environment. Knowing is also having the ability to articulate this view. To 'know' is to apply a construct to help organize thoughts, feelings, experiences, and behaviors into a uniquely individual 'blueprint' for helping adults make sense of the world. Education, experiences, relationships, intuitions, emotions, and life circumstances all contribute to, and continually update, women's ways of knowing.

Practitioner, according to this perspective, is often discussed as it relates to a formal teaching setting. Power imbalances inherent in teacher/learner situations are addressed, with the goal of empowering learners to develop more advanced methods of learning and knowing. Therefore, practitioner refers initially to an instructor and eventually to all participants in the group. These participants (practitioners) could be learning in any context, but all are learning to increase their knowing.

My Critique

Women's ways of knowing identifies how women (and other oppressed groups) learn, and identifies how these methods differ from methods developed within traditional forms of education. This perspective holds implications for those working with groups from marginal classes because it contributes to a more holistic understanding of learning. I illustrate this point with a personal example:

> Clients who visit me in my role as a social worker/employment consultant *are* sometimes 'voiceless'. They come to me because they seek to find employment or return to school. Their goal is to become free from welfare dependency, yet they may feel they have little to offer that will be valued in a formal work setting.

> One of my tasks as a practitioner is to help clients participate in developing a voice, which increases the intervention's effectiveness.
>
> My job is much more challenging when I work with these 'voiceless' clients because they are less able to articulate or explain their experiences. This leaves me with an incomplete understanding of their circumstances. In working with people who have not developed their voice, I feel I am doing my job *to* them, not *with* them. The effectiveness of any intervention is compromised. This 'voicelessness' is most identifiable in women who have been out of the workforce for extended time periods, new Canadians, and those with little formal education. These groups make up the large majority of my caseload. I often refer these individuals to lifeskills classes to facilitate the development of their 'voice' prior to placing them in an employment situation, because their chances of success without such intervention are slim. I try to break the cycle of failure many have experienced, by facilitating the development of their own personal empowerment.

This concept is limited by its exploration of an 'ideal' rather than 'real' world, and sometimes does not translate to circumstances in everyday life. In reality women have less earning power, and as long as this reality exists, helping women define themselves as equal is difficult. Women's learning styles may also be judged as inferior, especially if one believes that value as a member of society equates to monetary worth. Capitalist society appears to value money above other human qualities, as evidenced by what it pays for the skills of its citizens. That said, feminism offers me a goal to strive for. Emancipation, cooperation, new understandings of consciousness, and ordering the experiences of the world are identified as crucial by feminist researchers and others (Daloz, 1996; Lifton, 1993; Capra, 1996; Hill, 1998) if our world is to survive.

My understanding of women's ways of knowing and feminism offers answers to the following:

- **Who:** Do I learn and know the ways this perspective suggests? As a woman, do I feel oppressed by society? Do I feel inferior to others? Do my clients feel this oppression and react to it? Is this oppression part of the reason they need my services as a social worker?
- **Learning:** Have I learned in a process where I moved from a position of *silence* toward a position of *constructed knowledge*? Can I identify in myself what position I am operating from? Would a progression of learning increase my own sense of power?
- **Knowing:** Do I know because I can reflect on my own learning experiences, integrate this with what others have to say, decide what relates to me, and construct an 'integration' of all these voices into something that makes sense? Would this process make sense to others if taken to the public domain?

Multiple Intelligence

Gardner (1983, p. 60), who developed the concept of multiple intelligence, states "intelligence must entail a set of skills of problem solving, enabling the individual to resolve genuine problems or difficulties that he or she encounters, thereby laying the groundwork for the acquisition of new knowledge". He also recognizes that the ideal of what is valued will differ markedly, sometimes even radically, across cultures. "The creation of new products or posing of new questions will be relatively unimportant in some settings" (p. 61).

He outlines seven types of intelligence (which has subsequently expanded to eight). They are "verbal-linguistic, musical-rhythmic, mathematical-logical, spatial-visual, bodily-kinesthetic, interpersonal, intrapersonal, and naturalistic" (Kerka, 1999). No single intelligence is believed superior to another, and Gardner proposes that learners possess every type of intelligence in varying degrees.

Merriam & Caffarella (1991) identify that although intelligence was first conceptualized as a single factor of general ability, the construct has been broadened to include the notion that there are multiple forms of intellectual ability, and is also likely a measurable quality (p.158). The concept has since been widely applied to the area of career counseling/career decision-making and curriculum development/delivery (Antoniotti, 1999; Kerka, 1999; Shearer, 1999).

My Synthesis

After reading the authors mentioned above and using the *5 Ws and H* method to synthesize their ideas, I note the following about multiple intelligence:

- **Who is involved in learning/knowing?** This concept focuses on all learners at an individual level, following the psychological perspective that identifies unique traits in each person.

- **What is involved in learning/knowing?** Intelligence is 'a potential' in each person, not necessarily demonstrated by the possessor. It is a set of know-how (tacit knowledge of how to execute a task) rather than a set of know-that (a prepositional knowledge about the actual set of procedures involved in execution).

- **Where does learning/knowing occur?** Certain intelligences are valued more in some cultures than in others, thereby their 'value' according to external situations depends on the person's cultural situation. Intelligences exist within the learner but are valued (and perhaps therefore consciously improved) within society.

- **When does learning/knowing occur?** Intelligence is demonstrated when necessary to solve problems or create a 'blueprint' for further knowledge acquisition. If society values a certain type of knowledge, presumably the individual will take steps to further these innate abilities.

- **Why does learning/knowing occur?** Why is not a central question to this concept. "An individual in possession of an intelligence can be said to have no circumstance that prevents him from using that intelligence. Whether he chooses to do so (and to what end he may put that intelligence) fall outside the purview of this book" (Gardner, 1983, p. 68).

- **How does learning/knowing occur?** We can improve each type of our intelligence with practice of the specific skill. For example, reading increases verbal linguistic intelligence, while visiting a science museum increases mathematical/logical intelligence.

Learning is viewed by Gardner (1983, p. 334) as "the abilities entailed in an intelligence that can be used as a *means of acquiring information*" (p. 333). Thus, individuals may learn through the exploitation of linguistic codes, of kinesthetic or spatial demonstrations, or of interpersonal bonds... "and so it turns out that our various intellectual competencies can serve both as a means and as message, as form and as content" (p. 334).

Knowing and ways of knowing are directly related to unique personal intelligences. Gardner (1983) suggests that by identifying each person's unique 'way of knowing' at an early age, we can design educational programs tailored to that person. "My own hunch about strong intellectual abilities is that an individual so blessed does not merely have an easy time learning new patterns; he in fact learns them so readily that it is *virtually impossible for him to forget them*" (p. 385-386).

Practitioner is unspecified by this concept, because it focuses on intelligence on a personal level. However, practitioner seems to include all those engaged in self-assessment and subsequent efforts to increase or expand a specific intelligence. The concept of 'choice' is inherent in this theory, which suggests we can all choose to increase our intelligence if we identify such a need.

My Critique

Most people can recognize their strong and weak intelligences according to this concept. Even superficially, it is appealing since most people can apply it in some way to themselves. As a practitioner I value its individual perspective of learning, which my understanding of learning/knowing could not exclude given the focus on individual characteristics in western society (Hill, 1998). I chose multiple intelligences because of its applicability to career counseling and education. Although critics suggest that any method of classifying individuals limits our understanding of them (Kolb, 1984), I think identifying individual variables remains necessary. A framework to organize multiple ways of learning and knowing assists me to remain cognizant of individual differences. A personal example illustrates this point:

> I have identified that I have verbal/linguistic intelligence because I like to read and write but have limited visual/spatial intelligence because I get lost in traffic. I notice that some of my clients are better at certain tasks than others and as a result they often prefer to use those skills in their jobs.

I presently work with a man who excels at working with his hands; building, constructing, or fixing things, yet he cannot maintain a job. He is chronically unemployed (in spite of his demonstrated abilities) because co-workers do not like him, and he can never get along with the boss. Using this theory, I can assume his bodily-kinesthetic intelligence is high, while his interpersonal intelligence needs improvement. I endeavor to help him improve his social skills in the hopes that this allows him to experience success in his next job. This is one example of the many applications of multiple intelligence to my role as a practitioner.

My role as a career counselor has been greatly impacted by this theory, and my colleagues and I use the terminology routinely in our day to day activities as practitioners. Our problem-solving strategies often stem from a working understanding of the application of this concept, and I find it to be a valuable cognitive tool in my practice.

In summary, my understanding of multiple intelligence offers insight into the following areas and will be presented under this concept later in the visual model:

- **How:** Do I learn by utilizing the natural competencies I was born with? Do I choose to expand the skills I see as necessary to interact with my environment and make sense of it for myself? Is my choice of personal development tasks related to my innate abilities? Are my choices influenced by my society?
- **What:** Do I learn information I am most capable of learning according to my natural abilities? Do I also learn things that I am not as capable of learning, using my preferred method of organizing information? For example, do I learn math by reading math problems because I am a linguistic learner? Do I ask for directions rather than looking on a map when trying to find a friend's house?

Emotional Intelligence

Goleman (1995) suggests that our emotions and our ability to manage them have real applications regarding quality of life for people and society in general. He offers another way of viewing intelligence by addressing the role of emotions in the behavior and actions of people. His theory centers around interpersonal (our ability to relate to those around us) and intrapersonal intelligence (our ability to relate to ourselves). Interpersonal intelligence involves empathy, communication and social skills, while key components of intrapersonal intelligence include self awareness, self esteem, motivation and self regulation. There is a strong link to Gardner's work outlined in the previous concept.

In terms of adult education, Cooper & Sawaf (1998) have taken Goleman's idea and applied it to the area of personnel management, leadership and organization. Weisenger (1997) has used it to investigate various workplace settings. It is a relatively new concept that offers much potential application for adult educators. It may help to explain the behavior of people when all other explanations have been exhausted, while identifying new avenues of 'learning-for-action' to allow a more successful intervention to be attempted.

My Synthesis

After reviewing the authors mentioned above and using the *5 Ws and H* method to synthesize their ideas, I note the following about emotional intelligence:

- **Who is involved in learning/knowing:** Adults, children and all members of society are focused on. This concept follows the psychological perspective that identifies unique combinations of traits in each person.

- **What is involved in learning/knowing?** Emotional intelligence is the ability to manage emotions both internally (ie. emotions can be used to motivate oneself, calm down in the event of a crisis, etc.) and externally (ie. emotions can be used to relate to others in a positive way). The ability to identify and manage emotions is the key component of this theory, while developing/enhancing this ability is applicable to adult education practitioners.

- **Where does learning/knowing occur?** Learning/knowing occurs internally because emotions are seen as internal constructs. Authors who write about this type of intelligence have thus far focused on western society, drawing conclusions based on the observation of events in the USA. Emotions directly affect each person's effective participation in this society.

- **When does learning/knowing occur?** Emotional intelligence is learned in childhood but must be expanded upon in adulthood or relearned if necessary. Authors in the area believe that temperament is not destiny, therefore people are capable of learning more appropriate methods of managing their emotions, and can be taught how to improve their abilities in this area. One 'knows' when no further learning needs to take place, and people can manage their lives within society without harming themselves or other members.

- **Why does learning/knowing occur?** Using various examples of an eroding American society, Goleman (1995) states that emotional intelligence is decreasing. To reverse America's present course, educators must focus on developing this type of intelligence because this is the best way to decrease social problems such as crime and violence. Other authors have suggested that absent emotional intelligence may also impact work situations, or compromise the successful functioning of companies.

- **How does learning/knowing occur?** Emotional intelligence develops in childhood and its deficits are often identified in adulthood as well. The ability to become aware of, and take steps to correct, identified inadequacies is a central theme, but how this occurs will likely become an area open to further exploration

Learning is enhanced by the ability to reflect, critique, and become aware of emotions and our responses to these emotions. After self-assessment, learners can reframe their standard reactions to events. Motivation for engaging in this process, or teaching the concept of emotional intelligence to those lacking this ability are not clearly understood at this time.

Knowing is not formally addressed by this concept. It appears that people who are highly motivated and driven toward personal goals, self reflective, and get along well with others have emotional intelligence and therefore 'know' how to positively manage their emotions. It is implicitly identified that knowing refers to the absence of personal problems in a person who interacts positively with others in society.

Practitioners are those responsible for educating others who have been identified as lacking emotional intelligence. The applicability for practitioners in social work, justice and other human service areas motivates its inclusion here. Practitioners in these occupations endeavor to improve the emotional intelligence of the clients they work with, in an attempt to improve these people's lives and also encourage their successful assimilation into society.

My Critique

The idea of emotional intelligence introduces another dimension to my understanding of learning and knowing as identified in overt behavior. Many actions of others' appear to take place independently of reason (like women who repeatedly return to an abusive situation for example), therefore emotional intelligence adds a new understanding of individual motivations for actions.

The ability to get along with others, motivate myself to pursue what I want, or understand why I feel as I do in certain situations are examples of emotional intelligence. I illustrate applications of this concepts using the following personal examples:

> Folk wisdom among social workers dictates that 'common sense is not common.' As a practitioner, sometimes I cannot understand or address my clients' behaviors because they defy rational explanation. Why do people continuously repeat behaviors that trigger negative consequences or choose not to use skills when it would so obviously be in their benefit to do so? I know a teacher who is exasperated by smart children who refuse to apply themselves. I know a doctor who wonders why patients continue unhealthy lifestyles when they know the risks

involved. The list is endless and presents practitioners with the most puzzling of situations.

I often refer my clients to courses in life skills, parenting and job search because these interventions focus on the concept of emotional intelligence in their curriculum. These classes provide concrete examples of emotional intelligence in practice and offer me new tools to manage difficult issues. The success of such courses proves to me that including emotional intelligence in a repertoire of interventions aimed at decreasing negative behaviors is more effective than interventions that exclude this concept. For example, if a parent can be helped to identify the emotions that lead to child abuse, they can identify alternative methods of dealing with these emotions, thereby decreasing the child abuse. My experience has shown that these courses can teach clients to identify ineffective behavior patterns and identify new behaviors that lead to more positive results.

In summary, my understanding of emotional intelligence offers insight into the following areas and will be presented under this concept later in the visual model:

- **Why:** Do emotions affect how I process and use information? Do they effect my view of reality or what actions I take? Do I do things that defy rational explanation? Do clients I work with do irrational things that could be motivated by emotion? If I understood the emotions, could I better explain and understand my own behavior? Could I understand the behavior of others? Could I help alter that behavior with this insight?
- **Who:** Who does/does not have emotional intelligence? Are people with varied backgrounds more or less likely to have this intelligence? Does ethnicity, class, sex or demographics effect its development in adulthood? Are all emotions innate human qualities, and thereby assumed to exist in everyone?

Flow

My final concept is Csikszentmihalyi's (1990) idea of flow. He defines flow as "the state in which people are so involved in an activity that nothing else seems to matter, the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it" (p. 4). Goss (1991) says "flow occurs when a person's skills are fully involved in overcoming a challenge that is just about manageable" (p. 53). Optimal experiences usually involve a fine balance between one's ability to act and the available opportunities for action. "Flow experiences provide the flashes of intense living against this dull background" (Csikszentmihalyi, 1997, p. 30-31). Flow also involves increasing our ability to live 'well' and includes internal motivation that is highly personal, rewarding and satisfying for the learner. He suggests this potential is common to us all.

Since the initial concept was introduced, other authors have also investigated flow. (Goleman, 1995; Goss, 1991), and Csikszentmihalyi (1997) himself has expanded his own notion in a subsequent writing. Goleman (p. 90) says "the ability to enter flow is emotional intelligence at its best; flow represents perhaps the ultimate in harnessing the emotions in the services of performance and learning". Goss (p. 51) states "flow is the state in which learning and happiness are most completely merged". He calls it a 'marvelous feeling' that arises from intrinsic motivation and not from concern with external rewards or goals (p. 53- 54).

My Synthesis

After reading the authors mentioned above and using the *5 Ws and H* method to synthesize their ideas, I note the following about flow:

- **Who is involved in learning/knowing?** Flow can be identified in any context, environment or cultural reality. Flow (or the ability to develop it) is a universal human experience/potential.
- **What is involved in learning/knowing?** This concept is about meeting or striving to meet maximum potential in whatever task one chooses to do or learn. Flow involves the balance between challenge and skills, is action oriented, involves personal choice and can be created by any learner.
- **Where does learning/knowing occur?** Flow is internally motivated, although dependent on external influences that may prevent it from occurring (by producing overwhelming challenges the learner lacks skills to manage). Learning occurs in all environments.
- **When does learning/knowing occur?** Flow occurs when challenges and skill levels match, skills increase as the challenge increases, maintaining a perfect balance between the two variables. Learners participate in forming their own reality and acting within it.
- **Why does learning/knowing occur?** Flow occurs in an attempt to optimize one's experience of living. It is akin to euphoria, in synch with our environment, and connected to ultimate happiness on an internal level. This provides motivation for engagement in a chosen activity.
- **How does learning/knowing occur?** To create the euphoria of flow, learners must challenge themselves, experience and increase 'flow experiences' by critical reflection, take action within their environment, and ultimately control otheir own unique experience of the environment.

Learning is equated with flow in its most productive sense. Learning is a combination of doing, reflecting, challenging, and motivating oneself to positively grow, develop, and

engage in all facets of the environment. Such intrinsically motivated challenges produce the greatest learning and allow the most complete understanding. Learning includes elements of situated cognition, experiential learning and critical reflection (in the sense that theory is applied to practical real world situations).

Knowing is also equated with flow and is demonstrated by the ability to use all necessary skills to accomplish a task whose accomplishment requires all these skills. The concepts of learning and knowing are difficult to separate in flow because knowing leads to more learning, which leads to more knowing — a recurring pattern that may continue indefinitely in the individual. Consciousness expands based on this cycle.

Practitioners in flow are not isolated due to the universality of the flow experience. It does imply that practitioners excel in their jobs when they find 'flow' while at work. This is accomplished by practicing their skills to the best of their abilities and maximizing their experiences by expanding their consciousness in relation to the tasks inherent in their positions.

My Critique

In my opinion, the contribution of flow to the field of adult education lies in its ability to articulate a complete understanding of the motivation for learning and knowing. It allows for the exploration of the best side of human nature, making it a hopeful, positive idea that celebrates human accomplishment. Its concepts are 'transferrable' to all, regardless of time, situation, roles, or other variables. Constraints preventing people from living well only exist if allowed to do so internally, meaning that everyone holds the power and ability to be happy, regardless of external circumstances. I illustrate this point with the following example:

> I often think of why I love to travel, learn, read, write, or improve my ability as a practitioner. Examining my own life pursuits, I realize I have often done things seemingly independent of reason. "Why spend every cent you have to go to another country instead of buying a house and settling down?" Asks my bewildered family. Why keep going to school when you finished your degrees years ago, and you remain gainfully employed? I could not articulate an explanation, even to myself. The concept of flow offers me my first conscious understanding of my own actions. For me, it speaks to motivation, a concept I have never clearly understood in myself or in others.

In summary, my understanding of flow offers answers to:

- **Why:** Do I learn in order to maximize my experience of living? Do I strive to enter a state where my abilities and challenges exist in perfect harmony, time loses its influence, and I am 'living-well' as I define it? Do I seek that euphoric state of complete happiness, intrinsically motivated to reach and maintain this state? Do I seek to help others experience this feeling, and is that why I entered social work? Is this why I chose to pursue education? Is this why I travel, ski, socialize and do all the other things I love to do?
- **Practitioners:** Does the term practitioner apply to anyone who is doing what they love and doing it well? If maximum challenge and maximum skills exist in perfect balance in someone, can this person be said to be an effective practitioner? Is an effective practitioner one who has the ability to create the experience of flow while engaging in their work? Does this answer the question of what is an effective practitioner?

To Summarize and Continue

It seems fitting to end this section with my discussion on flow, because it draws together so many of the other concepts discussed in the paper. To summarize the rest of the literature review, I have highlighted a main point from each of the ten concepts.

Andragogy defined and created the field of adult education, recognizes that adults learn differently than children, and begins to outline these differences. Transformational learning speaks to how adults learn, identifies the critical process, and sees learning as a 'transformative' process. Experiential learning discusses the fact that adults learn from and within their life events, and situated cognition explains how these events may provide a framework used in the learning and knowing process. Critical theory isolates and expands the critical process that exists within many of the other concepts, and highlights its crucial role in learning and knowing.

Knowledge for action explains that learning/knowing must be demonstrated by behaviors, while women's ways of knowing expands by suggesting the ability to articulate and integrate knowing is central to the learning process. Multiple and emotional intelligences articulate individual differences in learning, and flow discusses the motivation for, and joy of learning.

Maintaining the concept of *triangulation*, I reviewed what at least three authors had to say regarding each concept, and used the *5 Ws and H* method of organizing my thoughts. Through the use of unique spacing, the reader understands and visualizes the process of going broad (to the public domain) then going deep (to the private domain), thereby illustrating verbally and visually my learning for knowing process.

This section completes the content and construct necessary to begin the development of my practitioner's model about learning for knowing. I have identified, reviewed, synthesized, critiqued and applied a large amount of information discovered in the literature. I now turn my attention to developing the *graphic* representation of my learning for knowing process as it occurred during the construction of this paper, while visually representing the major concepts taken from the public domain.

V The Model

At this point it is helpful to offer a definition of the term 'model', given its development was the goal of the paper. I reviewed three authors who each offer a unique understanding of the term.

Senge (1990) discusses the concept of mental models which he views as "deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action" (p. 8). He sees them as ways of thinking about something, internal images, often unconscious and he uses the concept to explain how they may limit one's ability to do something other than in the preferred way. He views mental models with an eye towards increasing organizational performance.

Mezirow (1990) offers a verbal model, essentially a seven-stage process he uses to describe the reflective judgement evolution of students concerning the nature of knowledge (p.160-166). His model is concerned with individual "changes in assumptions about sources and certainty of knowledge and how decisions are justified in light of those assumptions" (p. 160). He uses a model to understand and help others to expand the cognitive processes of adult learners, particularly with regards to critical reflection.

Jackson and MacIsaac (1994) offer a visual model of learning. They identify five components of the experiential learning process, and use their model to apply the concepts of experiential learning to the teaching and assessment components in adult education. These authors use the concept of 'model' in very different ways, but their similarity (and my working definition of a model) is as follows:

A model is a visual or verbal representation of a complex idea, concept, or theory that allows the learner to gain a method of organizing their thoughts that makes information easier to understand and apply to themselves and their world.

I choose to represent the process of developing my practitioner's model about learning for knowing visually, after first demonstrating it verbally within the construct of this paper. Visual learning is not my preferred mode of understanding complex concepts, as I generally employ a verbal method of organizing my thoughts. I chose the visual method to expand my learning/knowing process and 'step out of the box' of my preferred methods.

The first step in the process of developing my model was to pull together the major points from the preceding paper, and offer a concise summary of them visually. **Table 1** was designed with this goal in mind. Along the 'Y' axis I list the ten concepts reviewed in the body of the paper. The 'X' axis lists the *5 Ws and H* questions, and the definitions included for each concept. One can see that each concept offered an understanding of at least three of the components necessary for the development of my practitioner's model about learning for knowing. Summarized verbally in the body of the paper, they are now represented graphically:

Table 1: Concept Summary

	Who	What	Where	When	Why	How	Learning	Knowing	Practitioner
Andragogy	✓		✓	✓					
Transformational Learning					✓	✓		✓	
Experiential Learning		✓				✓	✓		✓
Situated Cognition		✓	✓	✓					✓
Critical Theory		✓			✓		✓		
Knowledge for Action			✓	✓				✓	
Women's Ways of Knowing	✓						✓	✓	
Multiple Intelligence		✓				✓			
Emotional Intelligence	✓				✓				
Flow					✓				✓

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With **Table 1**, I have drawn together the main points of the paper. I find myself now reflecting on how to improve my portrayal of the *triangulation* process I followed when answering my questions using the *5 Ws and H* method of information gathering. By this point I have also distinguished between internal and external influences on my learning for knowing, and recognize that knowing is the process of drawing these two dichotomies together in an integrative process.

Figure 1 was created to graphically represent the ideas of triangulation, while maintaining the portrayal of the *5 Ws and H* method. I also sought to illustrate the process of identifying internal and external influences, and to show the integration of the two as key to the learning and knowing process.

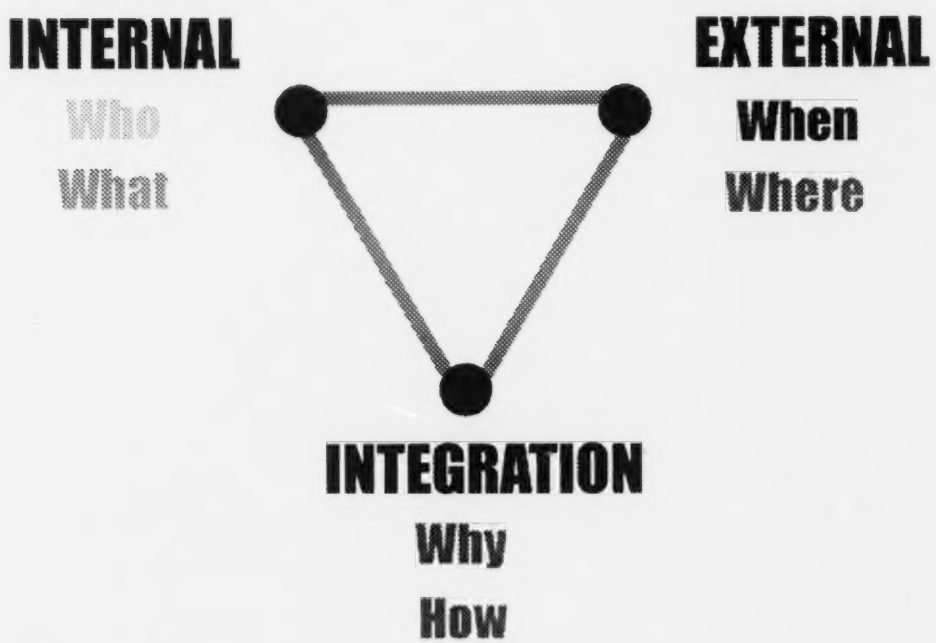

Figure 1: The Triangulation Process

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A view of the triangulation process is now clearly depicted, through which I incorporated the internal/external/integration process of learning.

I now seek to illustrate the questioning process within the triangle. I also wish to incorporate the process of asking questions using the *5 Ws and H* method of literature investigation, and illustrate that this process occurred during my exploration and research.

At this point I also recognized, as I represented throughout the paper, the process of going broad, then going deep when examining each concept, and also each question. I represent this idea in **Figure 2**:

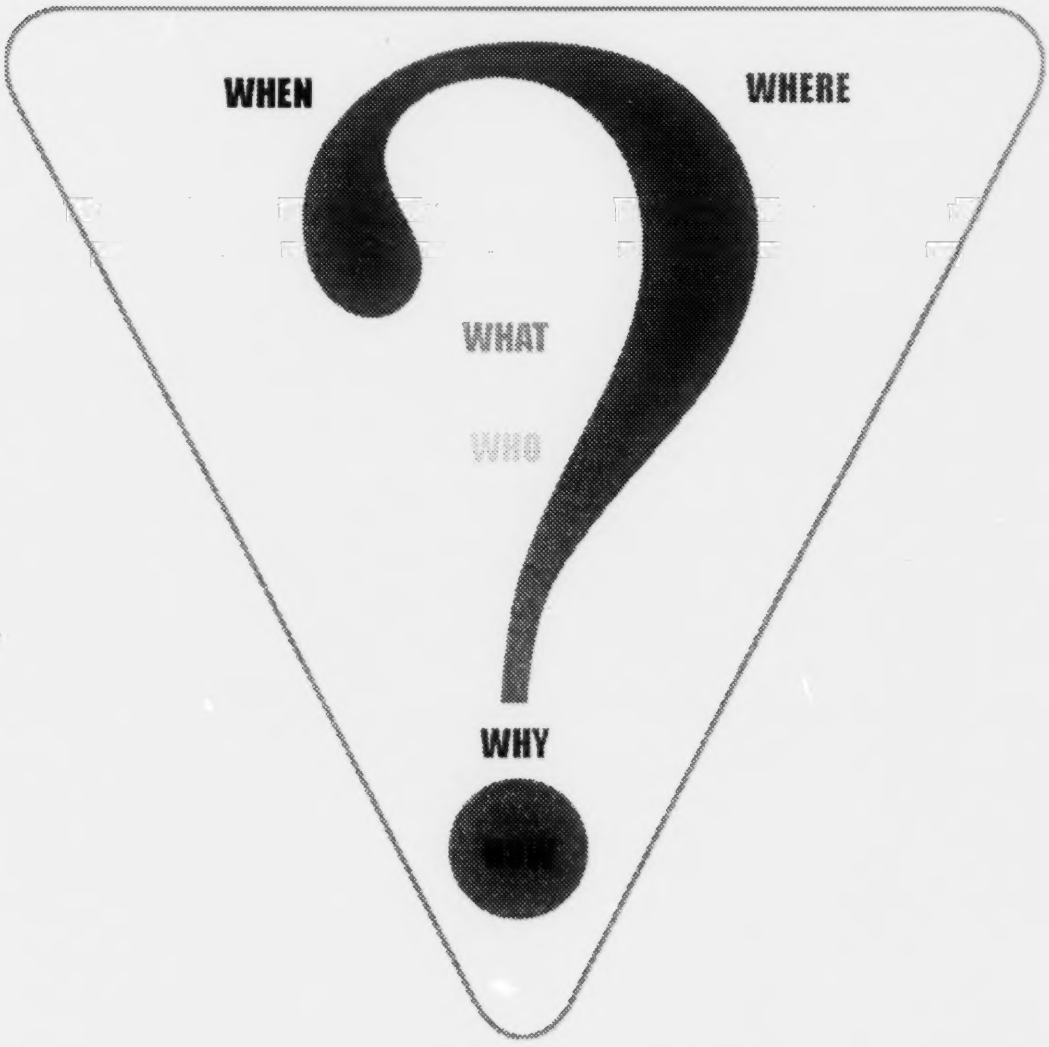

Figure 2: Questioning Within the Triangulation Process

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Learning and knowing is also progressive and infinite, based on the internal/external/synthesis process I depicted earlier. Recognizing this, I seek to illustrate this progression while still including the *5 Ws and H method.* The illustration of this idea is seen in **Figure 3**.

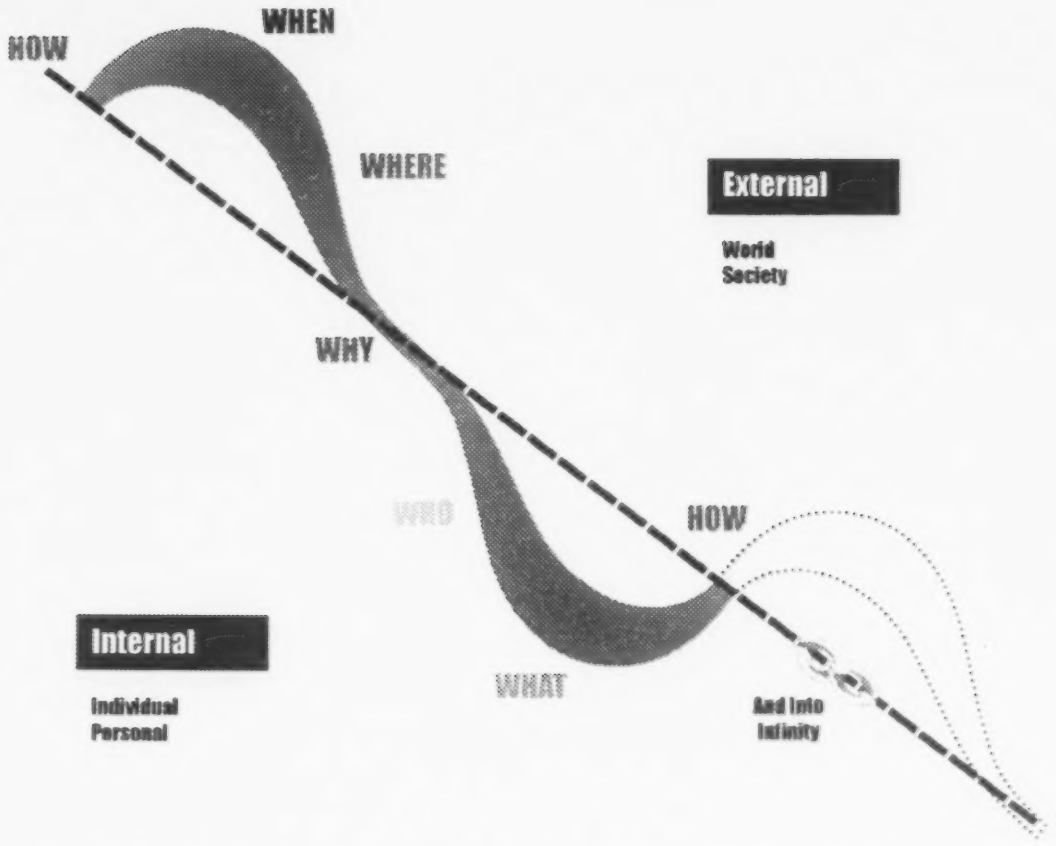

Figure 3: Questioning as a Process of Integration of External/Internal Variables

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Now, I have the process of learning/knowing visually represented as an integration of internal and external variables.

My next endeavor is to draw the ten concepts into the visual model with the *5 W's and H*, while maintaining the question mark idea.

The result of this endeavor is the next stage of the model depicted in **Figure 4**.

Figure 4: Questioning/Answering Within the Infinite Learning Process

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Figure 4 brought the concepts together fairly well.

Now I wished to add the internal and external variables I felt were important. I wanted to show the process of moving between the internal and external world in an infinite process, while still maintaining the question mark idea.

Figure 5 illustrates these thoughts.

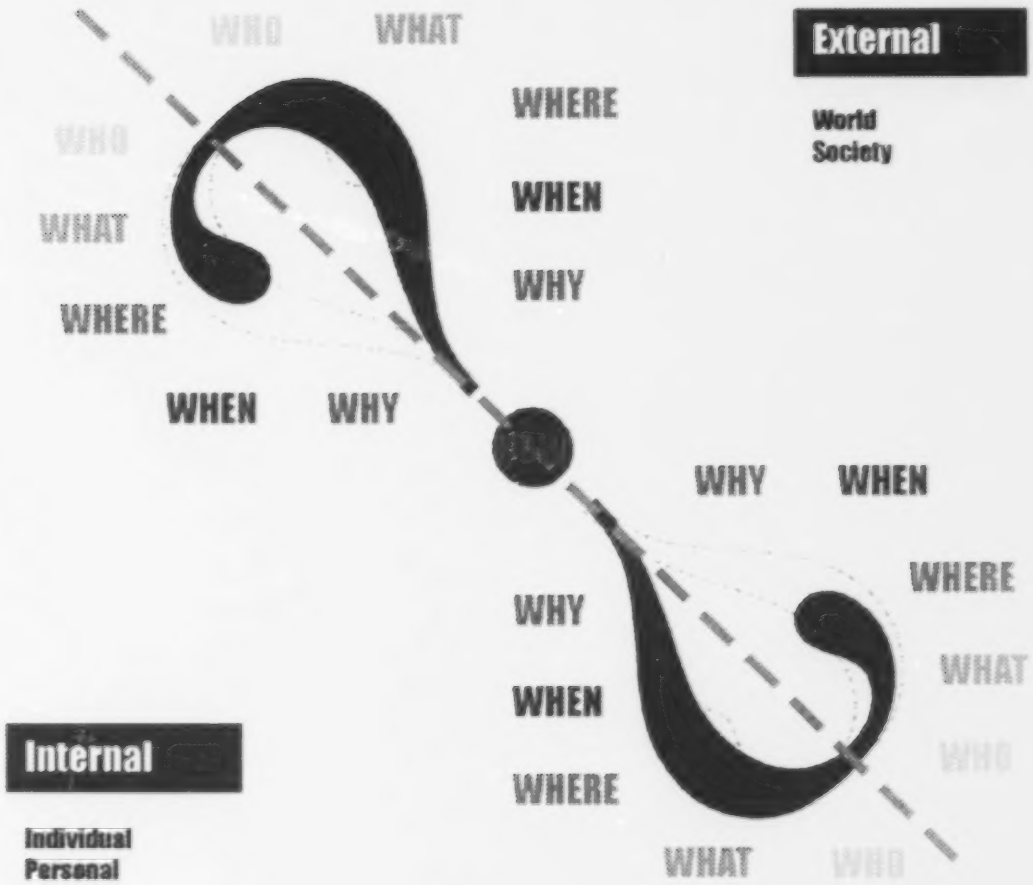

Figure 5: Questioning/Learning as an Infinite Process using Internal/External Influences

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Finally, an accumulation of all the concepts outlined in the paper is depicted in **Figure 6**.

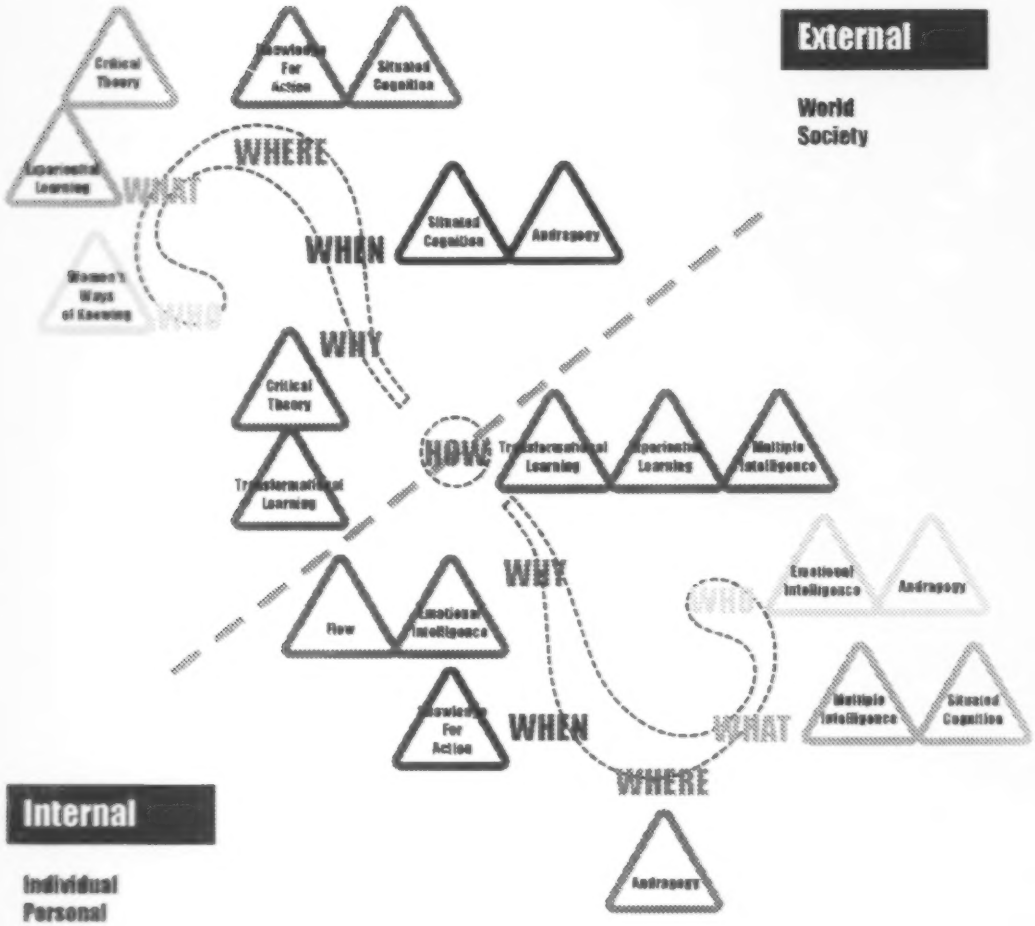

Figure 6: Questioning Including All the Concepts

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Figure 6 offers an amalgamation of all the major concepts outlined in the paper.

Although this visual portrayal is inclusive, it borders on too complex for a model, therefore I sought to simplify it again.

I could see the beginning of the concept of infinity in the last picture, so I modified the question mark into an infinity symbol. I sought to illustrate progression along a lifeline and to portray the learning for knowing process as an integration of internal and external influences, sometimes occurring in leaps, and sometimes very slowly. This visual representation appears in **Figure 7**.

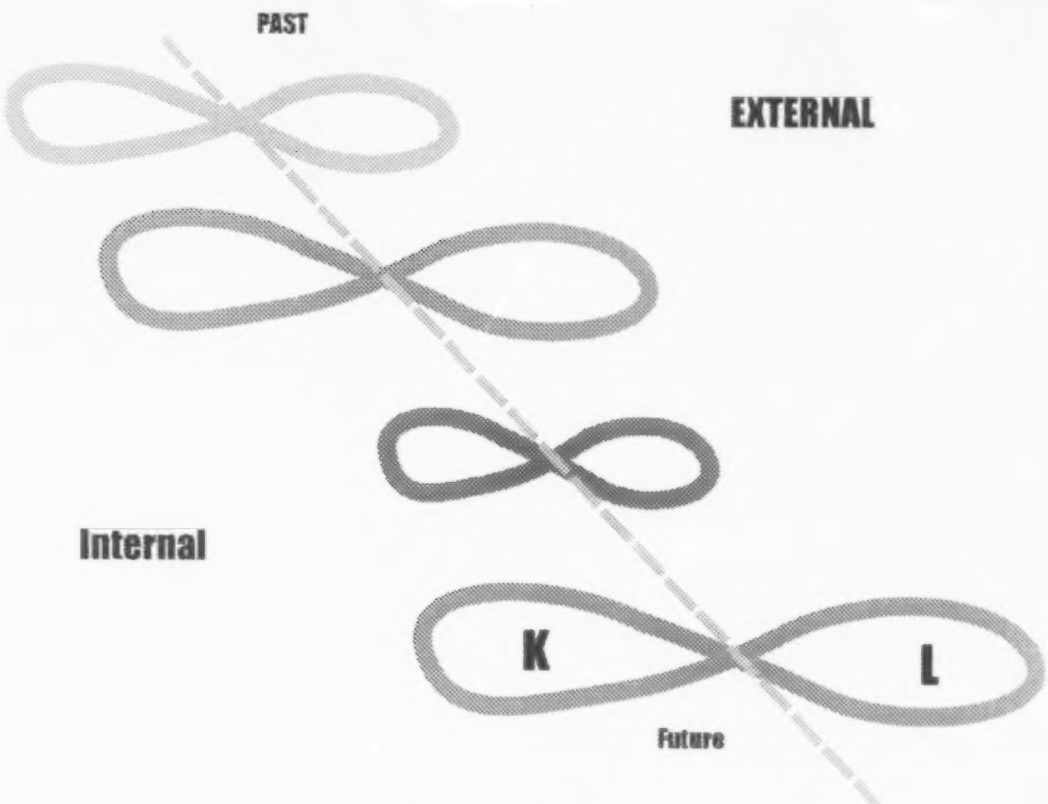

Figure 7: Questioning/Learning as an Infinite Lifelong Variable Process

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The final stage of the model development brings us back to the beginning of the process of learning for knowing, and is once again simple. The pictures together represent the process of asking a question, choosing concepts, and investigating them in the public realm while increasing complexity. Once answers are found, and understanding is complete, this new understanding is returned to the personal realm again.

Throughout the written and visual components of the paper, I have chosen a concept, asked questions of the concept to organize my investigation, and gathered information to expand my understanding. Once this understanding became thorough, I narrowed down my focus again, concentrating on the critique and application of each idea, and bringing it back to me and my personal application of it. The phases in my visual model represent this process.

This final diagram was included for its simplicity, but was also chosen to highlight my synthesis of my understanding of my learning for knowing process. If I were asked to sum up the entire process of learning for knowing in one phrase, it would have to be:

All learning Begins with a Question

VI Summary

As discussed in the introductory section, the purpose of this paper was to review, critique, synthesize and apply concepts existing in adult education literature as they relate to the development of my practitioner's model about learning for knowing. I undertook this challenge to begin to make explicit the tacit process of how I learn and know in relation to my role as a practitioner.

I wanted to work towards the development of a model for my own use because I required a method of organizing the learning and knowing I have taken from my graduate studies. I sought to present it in a way that would demonstrate knowledge of the field of adult education, while creating something I could make use of in future learning endeavors.

To accomplish this goal, I organized the paper into three major sections. The first section, the reflective background, identified internal and external influences that affect my learning and knowing processes. The second section included my literature review, synthesis, critique and application of ten prominent concepts that influenced my understanding of the field of adult education. The final section contained graphic representations of the learning processes that occurred within the first two sections. This model was my way of graphically and visually illustrating my learning for knowing process.

Key elements that emerge include my method of organizing information and my personal role in the learning process. To summarize the entire endeavor, I have come to view learning and knowing as follows: The learning/knowing process involves knowledge, attitude, practices, and skills. Cognitive and affective processes interact via critical analysis to produce actions and further learning. External and internal influences intertwine in a myriad of ways, and changing one component in the process effects each of the others.

The process of questioning, triangulation, integration of influences, and infinity were also key components in my understanding of learning and knowing. Learning depends on which questions I ask, which is dependent on what I know. My understanding of any concept develops by seeing a minimum of three points of view. Learning and knowing are infinite processes, both continuously interacting and influencing each other.

My learning process involves identifying a question in the personal realm, (based on what I already know, and my goals for further learning) and gathering information from a minimum of three other sources in the public realm (expanding thoughts and obtaining answers). Once a new understanding is obtained, I return with it to where I can identify its usefulness to my own life (returning to the personal realm). This process essentially involves a progression from narrow to broad, to narrow again and emerged as another key theme throughout the preparation of the model. All of these ideas were illustrated throughout the written and visual components of this paper.

After I had formulated my questions, researched to develop answers according to other writers, critically reflected on each segment, applied it to something within my own experience, and finally recorded the entire process, the stages of the model finally emerged.

I knew it was the beginning of a good model, because it met my needs as a practitioner/learner. It was reasonably simple, given the complexity of the subject matter, yet still included much of what I wanted it to represent. I thought it to be pragmatic, because I knew I could use it in other aspects of my life.

In conclusion, I have developed a verbal and visual representation of my learning journey as it occurred while researching and writing this paper. The development of visual representations is certainly not my strength, so I undertook this challenge to expand my abilities in this area. I would be amazed if future journeys did not modify its presentation here. I trust it will continue to expand as its application is tested and modified through future endeavors.

VII Future Directions

When I first sought to develop *my* practitioner's model about learning for knowing, I wanted to call it '*A*' practitioner's model about learning for knowing. I hoped that whatever worked for me may also work for other practitioners; that is, others could see and understand their own learning/knowing process represented in my model. I sought to develop a pragmatic idea within the private domain and subsequently offer it to the public domain. I hoped to solicit responses from others, and 'validate' my findings by investigating whether it reflected the learning processes others' have also engaged in.

Time constraints, ethical concerns and limitations of the scope of EDER 690 eventually prevented the validation component from being included here. I have not abandoned the idea given its importance to the process, it remains as the first recommendation for further study. I seek to present it to others, record their responses, and begin the process of validating my ideas. The model will undoubtedly change, progress and expand throughout this next stage of its development.

The second recommendation is to identify other tools that would help to further expand the model. The use of questioning was used for my purposes here, other tools such as portfolio construction, prior learning assessment, and experiential learning techniques which connect present skills, knowledge, attitudes and values with future ones are other potential tools that may be equally or more applicable to guide further additions. I plan to investigate and employ other methods of exploration as the model continues to evolve.

The third recommendation is to continue to review literature as it exists, and will continue to evolve. The views of the writers included here are by no means exhaustive or inclusive. Further development depends on continuing to pursue a deeper understanding of the concepts I have only superficially explored at this time, as they are more involved than their representation here would suggest. I was working towards simplicity, organization, and understanding on a very broad level, therefore future directions would include taking a more detailed view of each concept, allowing an increasingly complete representation of the learning process to be formed.

Finally, further research into the instructional design area would offer new ideas and methods of visually representing abstract ideas, and would therefore add more clarity and understanding to the existing visual model.

In closing, my practitioners model about learning for knowing and supporting documentation presented within this paper is not an end, but the beginning of a greater learning journey. Armed with the initial content and construct in its current form, I eagerly approach further stages in my personal growth and exploration. Eventually it may even apply to the journeys of others, but that is another paper.

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